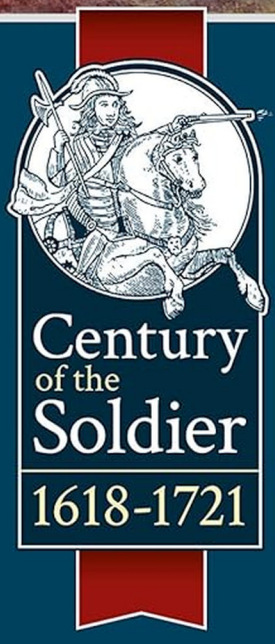
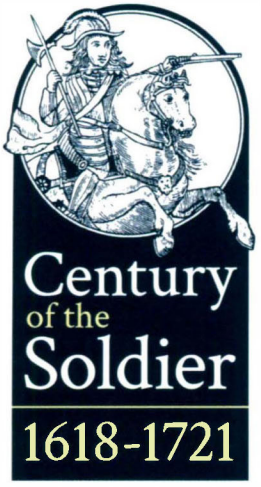
THE RUSSIAN ARMY IN THE GREAT NORTHERN WAR 1700-21

Organisation, Materiel, Training and Combat Experience, Uniforms

BORIS MEGORSKY





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Introduction

Superficial like any book on a broad subject, this work nevertheless attempts to provide a decent overview of what Russian forces were, what they were armed with, what they were clad in, and how they fought. It is not only about Peter the Great's new army and navy but also about irregulars and old troops he inherited and continued to employ during the struggle with Sweden. It is not only about conventional field or naval battles but also about siege warfare, small war actions or riverine combat. We will not cover, though, political and diplomatic developments of the war, the overall course of operations, administration and finances of the Petrine war machine. This book is based on a vast layer of period sources researched by the author as well as on the recent works of other Russian scholars who specialise in various aspects of Petrine military history. Comprehending such an amount of material in Russian so far was hardly affordable to international readers, so this work presents the up-to-date view on the subject for an English-speaking audience.

Scholars of the Petrine epoch enjoy an enormous amount of source materials that have been published from the late 18th century until today. These include, first of all, the Tsar's correspondence – 'The letters and papers of Peter the Great' (*Pis'ma i bumagi*) – a continued edition that started in 1887 and the recent part went out in 2003, overall 13 volumes so far covering the period from 1688 to 1713. They include not only sent letters of Peter's but, and what is often more informative, the incoming dispatches from officers. Official war chronicles, based on primary reports from the war years and edited by the Tsar and his secretary afterwards, were published in several versions, from the *Book of Mars* (1713 and 1766), *The Journal of Peter the Great* (1777), a series of campaign journals from various years (1850s), and the most comprehensive academic edition of the *History of the Swedish War* (2004). Besides those of the Tsar, there are campaign journals of his generals that also provide important narration. Probably the most detailed and well known is the published journal of Field Marshal Boris Sheremetev from 1701–1705 and 1711–1712.

Memoirs were not a popular genre among Russian people of the period, however some left notes about their war experience: Prince Boris Kurakin, officer of Semenovsky regiment and a diplomat, officers Grigory Chernyshov, Naum Senyavin, and the so-called 1700 Anonymous to name the best known. Foreigners in the Tsar's service left more – among them General Hallart, naval officer John Dean, John Perry, Moreau de Brasey, Peter Henry Bruce, Alexander Gordon, Peter Lacy. Besides, there were many foreign observers –

diplomats like Englishman Charles Whitworth, or Danes Georg Grund and Juest Juel, or Friedrich Wilhelm von Bergholtz from Holstein to name a few, travellers or captives who left their notes about various sides of Russian life, including the military. A fantastic amount of about 7,000 autobiographies written by officers of the Russian army between 1716 and 1728 provides valuable, although brief, information about their careers.

The majority of source materials printed until now appeared in the late 19th and early 20th centuries. They are the correspondence of generals and officials, regimental records, intelligence reports, prisoner interrogations etc. A great number of war-related archival documents were published by the Imperial Russian Historical Society (IRIO) and the Imperial Russian Military Historical Society (IRVIO), and some very thorough collections of primary sources were printed in the compendiums of military historical materials by Maslovsky and Myshlaevsky. Some relevant documents were also published by authors of regimental histories, such as Azanchevsky, Adamovich, Bobrovsky, Volynsky. Sources on the navy were published among the first in the multi-volume *Materials on the History of the Russian Navy* by Elagin. Nowadays the cause of those archivists and scholars is being kept on by Kirill Tatarnikov who, besides his monography on the Russian field army and its materiel (2008), published volumes of 18th century tactical instructions and manuals of the Russian army (2010) as well as documents related to post 1730 uniforms (2009) and, so far the jewel in the crown, thousands of autobiographies of active and retired officers of field foot, horse and garrison regiments written mainly in 1720–1721.

Despite the wealth of documents that have been published, further researches on the Petrine army can be, should be and actually are done using collections in Moscow (State Archive (RGADA), and Military History Archive (RGVIA)), in the St. Petersburg Archives of the Navy (RGA VMF), of the Artillery Museum (VIMAIViVS) and History Institute (IIRAN), the manuscript departments of the National Library or Library of Academy of Science, and in other places. Attempts to track regimental lineages were undertaken in the late 19th and early 20th centuries by military authors who created histories of then active regiments of the Russian Imperial Army. The works by Polikarpov (1909) and Zezyulinsky (1915) were dedicated to tracking heirs to the regiments of Peter's army. These were succeeded by Moisey Rabinovich who studied a wealth of archival sources and published his classical reference book *Regiments of the Petrine Army 1698–1725* (1977) where he listed over 600 units – permanent and temporary, regular and irregular, foot and horse – providing their commanders' names, the dates and circumstances of raising and disbandment and key campaigns and actions. This volume remains uneclipsed although work of such a huge scale cannot be without some errors; one may find several occasions where one and the same regiment is mentioned twice as two different ones, and a few regiments were probably omitted and overlooked too. Other articles of the same author covered Petrine officers' social origins, service of *streltsy* etc.

The cavalry enjoyed the attention of probably the most thorough scholar, Nikolay Volynsky, who besides writing one regimental history, published an impressive four volume work *The gradual development of Russian*

regular cavalry in epoch of Peter the Great with the most detailed description of its participation in the Great Northern War (1912). It was printed just before author died in 1913 and covered only the period until 1706. Two of the four volumes were an appendix where he published source materials from various archives, including the correspondence of many general officers, regimental records and officers' autobiographies. Volynsky remains an invaluable source for scholars nowadays

The naval studies all start with the classical work of Veselago, *Description of the Russian Maritime History* (1875). Pavel Krotov has been doing much new quality research during recent decades and remains the Petrine navy's major scholar.

Weapons were studied by scholars from key museums, and their works inevitably were based on and limited by the collections of respective museums. Namely, in the Artillery Museum in St. Petersburg, Evgeny Myshkovsky and Lila Makovskaya wrote on small arms and Nikolay Kulinsky on cold steel; Yury Shokarev from the State Historical Museum in Moscow wrote on small arms. Artillery was covered by Nikolay Brandenburg, the first director of the Artillery Museum, and Evgeny Kolosov from the same institution one hundred years afterwards. Today, artillery of the 16th–17th centuries, including the early Petrine period, is studied by Alexey Lobin and early 18th century artillery by Yury Manoilenko.

Tactical matters and training were written about by Dmitry Maslovsky in his *Drill and Field Service of the Russian Troops in Times of Emperor Peter the Great and Empress Elizabeth* (1883). This was the first special work on the subject with several omissions, however: for example Maslovsky failed to reveal and properly describe the use of pike. The author of this work published two articles on training and field tactics of infantry and dragoons.

Modern battle studies by prominent professors Vladimir Artamonov, Pavel Krotov and Valery Moltusov are mainly limited to the most notorious events like Kalisz, Lesnaya, Poltava, Pruth and Gangut. Some lesser-known events were described lately in articles and books by modern scholars Petr Avakov, Alexander Bespalov, Vladimir Velikanov, Sergey Ivanyuk, Pavel Konovalchuk and Eynar Lyth, Alexey Melnov, Dmitry Sidorov, Nikolay Slavnitsky, or this author.

The first study of the uniforms of Tsar Peter's army was published in 1842 by Alexander Viskovatov in the 2nd part of the multi-volume *The Historical description of dress and armament of Russian troops ('Istoricheskoe opisanie odezhdy i vooruzhenia rossiiskikh voisk')*. The uniforms in it were described, based on a few first-hand documents, period illustrations and surviving artifacts. Some details about regimental uniform colours were given in the appendix to the volume. However, sources used by the author were scarce and the authentic pieces were not described correctly. Thus the resulting research by Viskovatov came out as rather superficial and illustrations drawn to supplement his work were unreliable. Still, it was reprinted in 1899 and remained the only source of knowledge about Petrine uniforms for readers from the 1840s until the 1990s. Viskovatov was (and even still is) the most readily available and the most broadly known authority about the subject. Because of that, all third-hand literature published in Russia and elsewhere

in the world continues reproducing and circulating the details that are not necessarily correct. So this author attempts to reveal and discard deeply rooted misconceptions about Petrine uniforms that still exist today and keep being copied by generations of less informed artists, miniaturists and reenactors.

Many first-hand sources about the Petrine army, including documents related to uniforms, were published in the late 19th–early 20th centuries in numerous collections of archival documents, regimental histories etc. However noone then attempted to consider these materials in order to correct Viskovatov's work. The breakthrough in the Russian uniformology happened only in the last three decades, when new scholars like Sergey Karpuschenko, Sergey Letin, Vadim Egorov, Kirill Tatarnikov, Ilya Ulyanov, Oleg Leonov and Sergey Shamenkov started using new documents, memoirs and archival sources. Thus the research of Petrine uniforms goes on, albeit hindered by the following obstacles:

- The surviving costumes as a rule belonged to high-ranking persons. For example, the so-called 'Wardrobe of Peter the Great' is probably the largest known collection of male dress of the early 18th century. It is stored in the State Hermitage in St. Petersburg with some of its pieces dispersed across other minor museums. But it belonged to a ruling monarch while there are nearly no surviving items of Russian soldiers' or officers' uniforms or equipment
- The period documents about uniforms as a rule have little information required to recreate details; the cut, construction, dimensions or colour are rarely mentioned
- A considerable part of pre-1711 regimental documents were lost in the Turkish Pruth River campaign, so we have far better sources on uniforms after 1711
- The period illustrations are very few and show little detail; period prints, paintings or bas-reliefs of Russian soldiers do exist but it is hard to tell whether they are original eyewitness drawings or they are just copied samples of European artists

This all makes the research a very uneasy but intriguing process.

All the dates in the text are given in modern (Julian) calendar where the Battle of Poltava took place on 8 July 1709, and not in the old style (Gregorian) calendar that was in use in early 1700s in Russia or in England where the battle's date was 27 June (or in Sweden where it was 28 June).

1

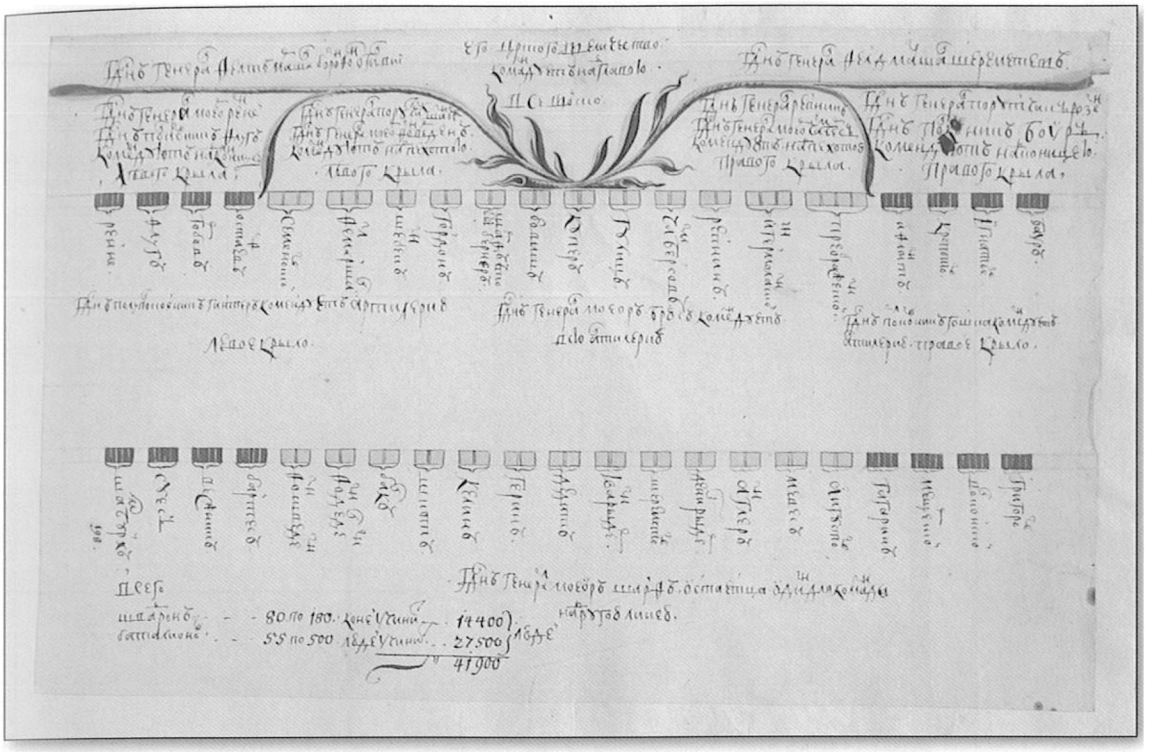
Organisation

Organisation of Armies and Units

Army Structure

The structure of the army and its command was far from orderly and consistent during the war years. In 1700 the main field army that set out to Narva had four divisions (often referred to as '*generalstvo*', i.e. generalship). The division of General Avtonom Golovin included two Guard regiments, eight infantry and one dragoon regiment. General Adam Weide had eight foot and one dragoon regiment. Troops of Novgorod Governor Ivan Trubetskoy were two new infantry, four *streltsy* and one *Reiter* regiment. The division of Anikita Repnin from Volga had nine foot regiments with no dragoons and it was late to take part in the Battle of Narva. Besides these divisions there was cavalry consisting of Moscow and Smolensk feudal horse that was given to General Boris Sheremetev. A large body of Ukrainian Cossacks under Hetman Obidovsky did not reach the army by the day of the battle. Artillery was under General-Feldzeugmeister Prince Alexander Bagrationi of Imeretia. Engineering was taken care of by Saxon General Hallart. The highest commander was Field Marshal Count Fedor Golovin (1650–1706) who left, together with the Tsar a day before the battle and command was given to Saxon Field Marshal Charles Eugene de Croy (1651–1702).

After 1700 Russian forces were split into several independent corps that reported directly to the Tsar. Field Marshal (since January 1702) Boris Sheremetev (1652–1719) commanded the largest body, the main army in fact, which was based in Pskov and acted upon Swedish Livonia/Livland and Estonia/Estland in 1701–1705. Major-General Petr Apraksin (1659–1728) with a smaller body was based upon Ladoga near Novgorod and faced the Swedes in Ingria/Ingermanland and Karelia in 1701–1705. General Anikita Repnin (1668–1726) led his corps in a short campaign to Riga to assist the Saxons in 1701; in 1703–1704 he commanded troops around St. Petersburg. Major-General Bogdan Korsak (1640–1721) commanded corps in Smolensk and operated in Lithuania. In Ukraine there were Ukrainian Cossacks under Hetman Mazepa and the Russian corps of Prince Peter Khovansky (1648–1716); the corps of Dmitry Golitsyn (1765–1737) from Kiev in 1704–1706



1. Order of battle of the field army. 1704–1705. Manuscript Collection, Library of Russian Academy of Science. (Unknown author)

was sent as an Russian auxiliary corps to Poland under the command of General Johann Reingold Patkul (1660–1707).

In 1704 the Tsar hired Imperial Field Marshal Georg Benedict Ogilvy (1651–1710) who was formal commander of the part of the army not under Sheremetev in 1705–1706 in Grodno, Lithuania, and then resigned due to opposition from the Russian generals. Starting in 1706 the entire field army was divided between the two Russian Field Marshals: the infantry went to Sheremetev and all the cavalry to Alexander Menshikov (1673–1729).

The corps of troops based in St. Petersburg operated in Ingria, Estonia, Karelia and Finland. From 1708 it was commanded by General-Admiral Fedor Apraksin (1661–1728).

Another body that operated separately from the main army in 1708–1709 was the so called corps of the far side of the River Dnieper (‘*Zadneprovsky*’) under General-Field Marshal-Lieutenant Heinrich von der Goltz (1648–1725). It consisted at most of six foot and six dragoon regiments and operated in Poland to support pro-Russian Poles and oppose Swedes and their Polish allies, to prevent them joining the King’s main army in Ukraine.

After 1711 the field army split into two main parts. One was against Swedes on the Baltic, and by the end of the war was called the Corps of Finland and consisted of 20 infantry regiments; in 1714–1721 it was under General Mikhail Golitsyn (1675–1730). Another corps (observation army), in Ukraine under Sheremetev included the majority of dragoons and served against the threat of Turks and Crimean Tartars.

Separate bodies were detached from both corps to act in Europe together with allies. The corps in Pomerania in 1712 under Repnin comprised 20

2. Tsar Peter in oriental costume during his Grand Embassy foreign trip. 1697–1698 (Unknown artist)

3. "Peter the First, Emperor, always the conqueror, Tsar and Autocrat of all Russia". 1703–1705. Officially, the title of Emperor was introduced in Russia only in 1721 but it was occasionally used in the early war years. The portrait is notorious for the rare sight of Peter in a wig. Note, the order of St. Andrew the Apostle earned by Peter in 1703, and the loose hat that shortly afterwards was replaced with the fashionable tricorne. (Adriaan Schoonebeek (1657–1705))

4. Boris Petrovich Sheremetev, General Field Marshal and Chevalier of Malta. 1701–1705. (Adriaan Schoonebeek (1657–1705))

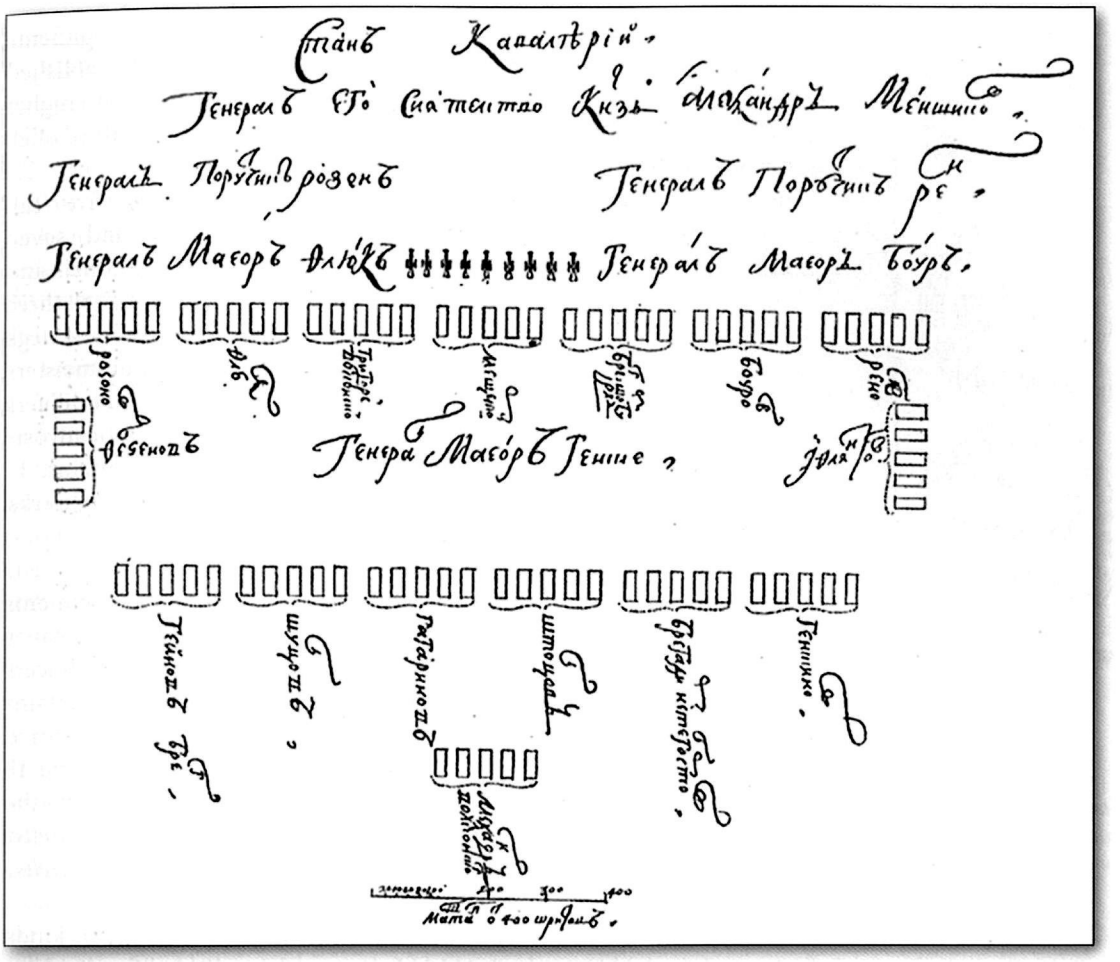
infantry and 12 dragoon regiments. In 1715–1718 another body under Sheremetev and Repnin was sent to Poland and later to Pomerania.

A corps of 27 Russian battalions was sent to Mecklenburg-Schwerin in 1717 when the Tsar's niece married Mecklenburg's Prince Karl Leopold. Other countries protested against Russian military presence in the region and the majority of the corps withdrew back to Russia. However, two infantry regiments and two grenadier companies were left as 'guards' to the Russian Princess of Mecklenburg. When in 1719 Karl Leopold had to escape under pressure of Imperial (Luneburg, Wolfenbuttel and Hannover) troops, his little army marched to Russia where its native Russian regiments rejoined Petrine forces, and its native Germans remained in Russian service in Ukraine as the tiny Mecklenburg Corps until 1744.[1]

By 1708 the field infantry became a more-or-less orderly composition of several divisions that, with reservations, lasted until the end of the war. The army lists of early August 1708 show three infantry divisions in the main army in Gorki, Lithuania, split into brigades.[2] The 1st Division or Sheremetev's (in 1709–Menshikov's, in 1711 Weide's), brigades of Sheremetev, Lieutenant-General d'Albon, Major-General Dedut. The 2nd Division or Repnin's had the brigades of Repnin himself, of Lieutenant-General Chambers and Major-General von Schweiden. The 3rd Division of Hallart included the brigades of Hallart, Major-General Belling and Brigadier Buterer. The 4th Division (in 1711 of General Enzberg) operated separately in Poland and was part of Goltz's Corps. The Guards brigade or division of Mikhail Golitsyn included the two Guard regiments, Ingermanlandsky and Astrakhansky Infantry.

1 V.I. Egorov, "'Pod gerbom meklenburgskim" v Germanii i v Rossii. Gvardiia tsarevny i Meklenburgskii korpus 1717–1743' ["Under Mecklenburg coat of arms" in Germany and in Russia. Guards of Princess and Mecklenburg Corps 1717–1743] in *Nash vosemnadtsatyi vek. Voennyi sbornik* [Our 18th century. Military Collection], (Moscow, 2014), pp. 94–104; Nelipovich, S., 'Meklenburgskii vopros v nachale XVIII veka' ['The Mecklenburg Issue in the early 18th century'] in *Ibid.*, p. 105.

2 *Pisma i bumagi Petra Velikogo* [Letters and papers of Peter the Great]. T. 8. (Moscow, 1951), Vol. 2, pp. 510–512; Myshlaevskii, A.Z., *Severnaia voina, 1708 god: ot reki Ully i Bereziny za reku Dnepr* [Northern War, year 1708: from the rivers Ulla and Berezina to the other side of the river Dnieper]. (SPb, 1901), Appendix, pp. 12–13.



5. Order of battle, cavalry of General Prince Alexander Menshikov before Kalisz, 29 October 1706

Composition of divisions varied from year to year or even more often; regiments were transferred from one division to another or to detachments. Beneath commanders of divisions there were brigade commanders, but they were rarely mentioned in battle orders which makes it hard to recreate the detailed structure of the army at any taken moment.

Field cavalry had an even less fixed structure. Dragoon regiments were distributed between four dragoon divisions, but the generals changed often also. At the start of the 1711 campaign there were five brigades; two of them had two regiments, and three had four. Later in the course of campaign the dragoons were split into two divisions each comprising two brigades of four regiments but even then units interchanged between brigades.[3]

The establishment ('*Tabel*') of 1712[4] set a high degree of order and standardisation in the army. Implemented by the Tsar's decree it set forth

3 A.Z. Myshlaevskii, *Voina s Turtsieiu 1711 goda. Prutskaia operatsiia. Materialy, izvlechennye iz arkhivov* [War with Turkey in 1711. Prut operation. Materials from archives]. (SPb, 1898), pp. 282, 293, 295.

4 *Severnaia voina. Dokumenty 1705–1708. Sbornik voenno-istoricheskikh materialov. Sost. D.F. Maslovskii* [Northern war. Documents 1705–1708. Collection of military-historical materials.

6. Coins of the early 1700s with a variety of Russian double eagles. J.H. von Lohenstein, ***Des Moscowitischen grossen Czaars Petri Alexiewiz Leben und Thaten***. Frankfurt und Leipzig, 1710.

composition of the field army of 42 infantry and 33 dragoon regiments, prescribed the overall number of generals and staff members, and established money wages for every single rank. It also stated that foreigners (with higher pay compared to natives of the same rank) could only occupy one third of all vacancies on a regimental level and less than half among generals.

The 'General Staff' included two general-field marshals, five 'full' generals, seven lieutenant-generals, seven major-generals, and seven Brigadiers. Their staff members were general-adjutants (eight colonels and five majors), Flugel-adjutants (10 captains, 10 lieutenants, 14 ensigns), three general-auditors, three general-auditor-lieutenants, three general-kriegs-zahlmeisters, two general-wagenmeisters, three general-proviantmeisters, two general-quartermeisters, three general-fiscals, three general-gewaldigers, three postmeisters, three doctors, three pharmacists, two general-provosts, seven brigade auditors, seven brigade majors, three brigade captains, 12 commissioners, 16 general clerks, and 27 commissioner and proviant clerks.

Regimental Structure

Unlike organisation in the army – division – brigade levels, that of regiments is more clear to us today. The *streltsy* regiments traditionally had 10 companies which was the case at the start of the 1700 campaign. The senior officers were colonel and lieutenant-colonel; companies were governed by captains only and had no more than 100 privates and NCOs. Factual strength varied of course. For example in 1696 before the second Azov campaign the 13 Moscow *streltsy* regiments had from six to nine companies. After 1700 the 'thousand strong' units were split in twos. During the 1704 campaign *streltsy* regiments in Livonia were five companies strong. However, new *streltsy* regiments raised in 1702 had 10 companies.

The establishment of the new foot regiments in 1700 was of two kinds. Infantry regiments that were raised in Moscow and constituted the divisions of Generals Weide and Golovin had 12 fusilier companies. A regiment had colonel, lieutenant-colonel, major, nine captains, lieutenant-captain, 11 lieutenants, 12 ensigns, 36 sergeants, 12 captains-of-arms and 48 corporals.

Repnin's Division, raised in Nizhny Novgorod, had infantry regiments that were smaller (eight fusilier companies) but had one grenadier company. The two infantry regiments raised in Novgorod in 1700 had eight companies. After 1701 in the Moscow regiments the number of companies started decreasing from 12 to 11, 10, nine or eventually eight companies. Grenadier companies appeared, too; they were weaker (70 men) than fusilier companies (100 men).

The Preobrazhensky Life Guard regiment from 1700 onwards had a grenadier, a bombardier and 16 fusilier companies in four battalions. The Semenovsky Life Guard had grenadier and 12 fusilier companies in three battalions.

The 1705 establishment introduced after the proposal of Field Marshal Ogilvy set a new uniform structure: an infantry regiment had eight fusilier companies in two battalions plus a grenadier company, 1,300 men in total. A fusilier company

Compiled by D.F. Maslovskii] Vol. 1, (SPb, 1892), Appendix, pp. 47–52.

now had 150 men in total, including three officers (captain, lieutenant, ensign), sergeant, under-ensign, fourier, clerk, three drummers, three officers' servants, six corporals, 12 *Gefreiters* and 112 men. The grenadier company had a total 100 men without ensigns and two thirds of other ranks as compared to fusiliers. Several infantry regiments that had generals as their commanders (Kievsky, Koporsky, Moskovsky, Narvsky) had three battalions until 1712.

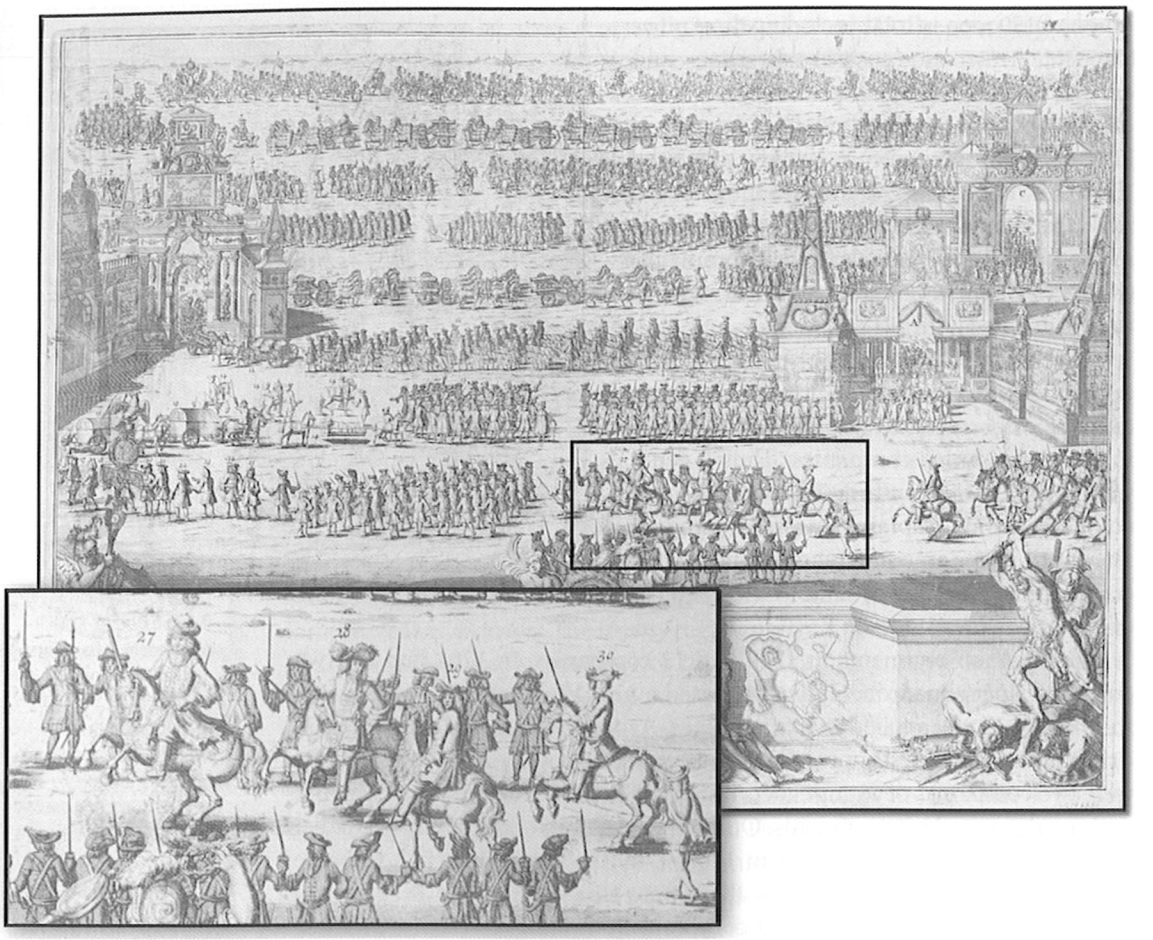
From 1704 to 1712 three senior officers of a regiment – the colonel, lieutenant-colonel and major – received captain's commissions in the three senior companies. Thus a general who 'owned' a regiment was entitled to general's, colonel's, and captain's wages altogether. The need for someone who would actually command a company of senior officer led to the introduction of a new rank of captain-lieutenant.

7. The double eagle as it appeared in 1705 in ***Vedomosti***, Russia's first newspaper.

The dragoon regiments in 1700 had 12 companies, in 1701 had 10, two companies per squadron. Ogilvy proposed a new 12 company establishment in 1704 but it only applied to one regiment, Azovsky. Grenadier companies in dragoon regiments first appeared in late 1703 in Moskovsky and Troitsky – they were two companies of young cadets raised by Sheremetev earlier that year and now amalgamated into regiments. Other dragoon units did not have grenadier companies until 1705–1707 and in 1708–1709 they were detached to horse grenadier regiments. Nevertheless, there were elite sub-units in dragoons in the 1700s: a lancers company and corporalship of hand-mortar men. These will be described below in the section about cavalry materiel.

8. The eagle from the 1710 artillery treatise by Timofey Brink.

The 1712 establishment confirmed that all line infantry regiments now had two battalions or eight fusilier companies. A 1,200 strong unit had regimental staff of a colonel, lieutenant-colonel, major, quartermeister, adjutant, auditor, officer of the train, doctor, clerk, and provost. Ranks in a company were four officers (captain, lieutenant, second-lieutenant, ensign), a sergeant, under-ensign, captain of arms, fourier, six corporals and 144 privates. Besides, in a regiment there were eight clerks, nine oboe players, eight doctors, 16 drummers, eight each of provosts, blacksmiths, carpenters, and locksmiths, 86 servants, 86 waggon drivers and 240 train horses. Grenadier regiments were to have eight grenadier companies in two battalions as well. The only exceptions were the Ingermanlandsky



9. Triumphant parade in Moscow after victory of Poltava. Fragment. 1711. (Alexey Zubov (1683–1751)).

Regiment which retained its third battalion and grenadier company, and Astrakhansky's which retained its grenadiers, too.

In respect of mounted troops the 1712 establishment confirmed 10 fusilier companies for dragoons and 10 grenadier companies for horse grenadier regiments. A dragoon regiment had similar regimental staff; a company staff was similar to that of an infantry company except that dragoons did not have a second lieutenant, their sergeant was called a Wachmeister and corporals and privates were 120 in total. Outside company ranks were two trumpeters, one kettle-drummer, 11 oboists, 10 doctors, 20 drummers, and 10 each of provosts, blacksmiths, carpenters, and locksmiths, 94 servants, 100 waggon drivers, 300 train horses and 1,000 dragoon horses.

Naming of Units

Regiments were named after their colonels throughout the 17th century as well as in the early 1700s. This caused considerable confusion because commanders changed often and thus tracking regimental lineage is at times problematic. Unit denomination included the type of troops and commander name; mention of a first name was often as important because in many cases relatives – brothers, cousins or fathers and sons – could be found

commanding different regiments. Usually units were named, such as the Soldier Regiment of Col. Savva Aigustov (*'Soldatsky polk Savvy Aigustova'*) or the Dragoon Regiment of Col. Alfery Schnevetz (*'Dragunsky polk Alferiya Shneventsa'*) or the *Streltsy* regiment of Stepan Strekalov (*'Streletsky polk Stepana Strekalova'*). Exceptions to this rule included the addition of place where a unit served (e.g. the Soldier Regiment in Sevsk of Col. Annenkov (*'Soldatsky polk v Sevske polkovnika Annenkova'*)) or where it was raised (e.g. the Moscow *Streltsy* Regiment of Colonel Such-and-such (*'Moskovsky streletsky polk...'*)

Another exception was elite regiments – Butyrsky, Preobrazhensky and Semenovsky – named after settlements nearby or within Moscow where they were initially raised and quartered. The village Preobrazhenskoe, in turn, got its name from the Russian Orthodox church of Transfiguration (*Preobrazhenie*).

Naming after the colonel was first abandoned in dragoon regiments where provincial names were introduced in 1706. The foot were given their provincial names in 1708 after Repnin and Sheremetev asked the Tsar for this a number of times. When implementing this change and ranking the regiments, Peter probably considered units' seniority and honours as well as status of the province. Many names were taken from the Tsar's full title (The Great Lord Tsar and Great Duke of all the Great, Little and White Russia Self Upholder, of Moscow, Kiev, Vladimir, Novgorod ... etc.).[5] Thus some of the most senior regiments were named after the main Russian cities Moskovsky, Kievsky, Vladimirsky, Novgorodsky; others were named after recent acquisitions (Azov, Yamburg, Ivangorod, Koporie, Narva, Schlisselburg, Vyborg etc.) or after other realms within Russia (Arkhangelsk, Astrakhan, Kargopol, Velikiye Louki, Viatka, Vologda, Voronezh etc.).[6] The majority of names were those of cities or towns like all the examples above, and only few were names of regions (e.g. Ingermanland, Siberia). One foot and a dragoon unit were named after River Neva (*Nevsky*).

Still, there were few exceptions to the provincial naming system of 1708. The Lefortovsky infantry regiment, one of the two old elite Moscow units, retained the name of its late colonel and the Tsar's friend Franz Lefort who died in 1699. One regiment was named after a place outside Russia – raised from remnants of Russian auxiliary corps fighting in Saxony at Fraustadt in 1706 and making its exemplary march breaking through back home under Colonel Rentzel; thus as a distinction the unit was called either Saxon (*Saksonsky*) or Rentzel's.

The reform of 1708 did not mean that all units at once were renamed. Regiments kept receiving provincial names later (e.g. Colonel Inglis' Regiment became Vyborgsky in 1712 after Vyborg was taken in 1710) and there were some more regiments that were still named after their colonels. But

5 It must noted that 'Muscovy' has never been Russia's own name for itself. The monarch's official title was 'Tsar' ('Czar') until 1721 when 'Emperor' was adopted; but foreign envoys sometimes addressed Russian sovereign as the Emperor before.

6 A. Smirnov, 'Nechto vrode malenkoi natsionalnosti. Polki petrovskoi pekhoty: obretenie litsa' [Something like 'Small nation. Regiments of Petrine infantry: finding face'] in *Rodina*, 2009, 7, pp. 8–12.

in general geographical naming became tradition for the Russian Imperial Army until the end of its history. However, colonels' names were still used for horse grenadier regiments (e.g. Col. Kropotov's). Foot grenadier regiments were confusingly called either by their number (e.g. 1st, 2nd Grenadiers) or by the commander of the division to which the unit belonged (e.g. the Grenadier Regiment of Repnin's Division) or by the regiment's colonel (e.g. Colonel de Bois).

The idea behind introduction of provincial names was to give permanent names; some say it meant to copy Swedish *indelta* system. In 1712 regiments were supposed to be funded by their nominal provinces but this approach soon failed. So in general regiments of the Petrine new field army neither recruited in 'their' provinces nor quartered there and had no connections to it (lack of links between units and places is evident if one looks at the Kazansky infantry that was raised in Moscow, Arkhangelogorodsky in Kazan, etc.; see Appendix for details). It is reasonable then, that the provincial names given in 1706/1708 and those of Guards should be read as an adjective with *-sky* [*-skii*] at the end (e.g. Moskovsky, Nizhegorodsky), as those became proper names to units; on the contrary units of the old army that were territorial should be named after their parent towns (Moscow, Nizhny Novgorod). For sake of simplicity when mentioning regiments in the pre-1706/8 period we use their post-1706/8 names, where available. In the Appendix with regimental uniform colours both the adjective name and the name of a place is given for those who would not want to mess with *-skiis*.

The Old Army

The pre- and early Petrine military force was a complicated system.[7] Functionally, it included field (*polkovaya sluzhba*) and garrison (*gorodovaya sluzhba*) forces. In terms of arms they were cavalry (feudal horse, hussars, lancers, *Reiters*), infantry (*streltsy*, soldiers), artillery and cossacks. Socially, all the servicemen were either landowners (*po otechestvu*) or enlisted free individuals (*po priboru*) or peasant conscripts (*datochnye*). Some only received land from the government, others were issued weapons, provisions and textiles for their clothes and paid a money wage. Territorially there were districts (*razryad*) with centres in Moscow, Vladimir, Ryazan, Smolensk, Novgorod and Pskov, Belgorod, Sevsk, Tambov, Kazan, Ukraine, and Azov.

By the start of the Great Northern War this old force had experience in fighting Turks and Tartars between 1686 and 1699. The best known were failed campaigns in Crimea (1686 and 1687), the 1695 campaign on the lower Dniepr with the successful siege of Kazikermen and with a failed attempt on

7 For an overview see: V.S. Velikanov, 'K voprosu ob organizatsii i chislennosti rossiiskikh vooruzhennykh sil v 1699 g.' ['About the organisation and quantity of the Russian armed forces in 1699']. Proceedings of the *Voina i oruzhie. Novye issledovaniia i materialy. Trudy Chetvertoi Mezhdunarodnoi nauchno-prakticheskoi konferentsii* 15–17 maia 2013 *goda* [War and Weapons. New studies and materials. Works of the 4th international conference, Artillery Museum, 15–17 May 2013], (SPb: VIMAIViVS, 2013), Vol. 1, pp. 335–350.

Azov, and then the taking of Azov in 1696. Prior to that there was a two year -long defence of Chigirin against the Turks in Ukraine in 1677–1678. This gave the 'Moscovites' rather special experience and they were accustomed to eastern warfare that was far from linear battles against regular infantry and cavalry. Not to mention the absence of any naval background. The most recent encounters with European forces were as late as the 1660s against Poles, and the 1650s against Swedes.

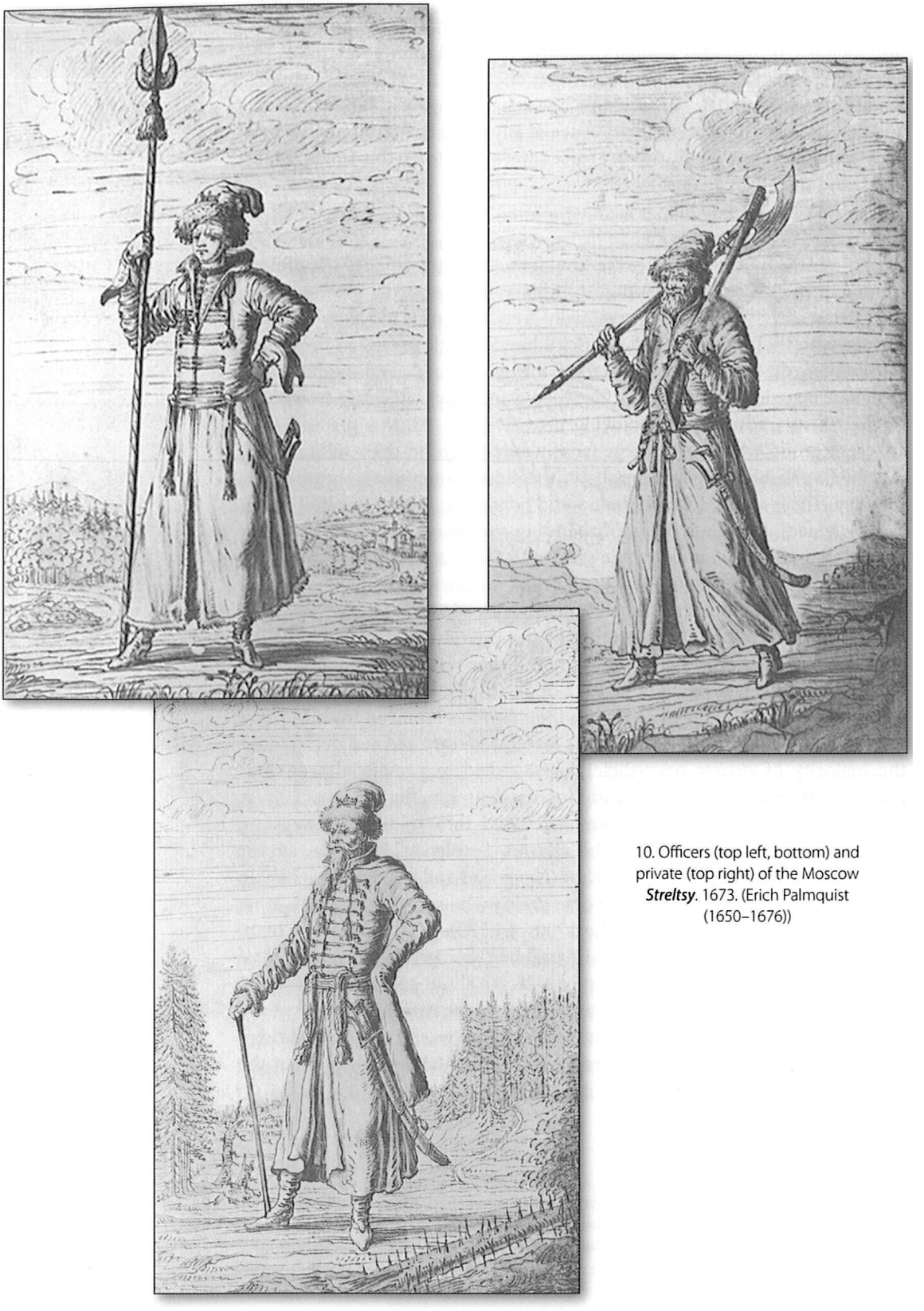
Infantry

Streltsy (literally, 'shooters') were the first standing infantry in Russia created in 1550. *Streltsy* were not just military, they formed a separate estate in Russia's society, they were personally free, served in towns where they resided with their families, and their children as a rule served in *streltsy* too thus making up dynasties. In peacetime, they performed garrison duties and went out occasionally; most of time they were busy with their household or their own trade of craft, enjoying tax privileges. All this made them a coherent group whose social role far expanded beyond their military role. Still, by Peter's reign they were probably the most numerous and professional infantry. There were Moscow *streltsy* and *gorodovye streltsy* in other towns and provinces. Despite a decree disbanding *streltsy* regiments in 1698 they existed well into the war and some even until the 1720s.[8]

Moscow *streltsy* were the most privileged category, even if some of their regiments were temporarily or permanently moved to other locations. Their commanders were close to the elites of the capital city, their men held a considerable share of Moscow economy and they were involved in political plots – against Peter's relatives in 1682 or against Peter himself in 1689 and 1698. By summer 1700 all *streltsy* with their families removed from Moscow. The main plotters and organisers of the revolt were tortured and decapitated; the majority of *streltsy* nevertheless were exiled to provincial regiments, retaining their ranks, privileges and Moscow denomination.

In some provinces *streltsy* were converted into soldier regiments in 1698–1700, such as in Arkhangelsk, Kazan, Smolensk. However, *streltsy* units kept serving in Astrakhan, Pskov, Novgorod and one in Smolensk. In Astrakhan besides foot there were horse *streltsy* who served along with other irregular horse in Ingria during the 1700s. In 1705–1706 the *streltsy* of 10 foot and horse regiments rebelled in Astrakhan, enraged by outrage of local administration and the enforcement of a decree about costume reform and beard shaving. After the revolt was suppressed, some Astrakhan *streltsy* were sent to Ingria to earn forgiveness in combat; there was a plan to send them as a forlorn hope that was to be first to assault on Vyborg in 1710, but the fortress surrendered before the storm.

8 M.D. Rabinovich, 'Streltsy v pervoi chetverti XVIII v.' [Streltsy in the first quarter of the 18th century] in *Istoricheskie zapiski* [Historical Notes]. (Moscow, 1956) T. 53. pp. 273–305; A.E. Pisarev, *Boesposobnost' moskovskikh streltsov vo vt.pol. XVII – nach. XVIII vekov. Dissertatsiia* [Combat effectiveness of Moscow streltsy in the second half of the 17th–early 18th c. PhD Thesis], (Moscow, 2017).



10. Officers (top left, bottom) and private (top right) of the Moscow ***Streltsy***. 1673. (Erich Palmquist (1650–1676))

There were two 1,000 strong *streltsy* regiments in Pskov by the start of the war, part were at the siege of Narva and another part on Lake Peipus defeated by Swedish Colonel Schlippenbach in the combat of Ismen. Between 1701 and 1704 the two Pskov regiments took part in the operations of Field Marshal Boris Sheremetev in Livonia, including the defence of Pechory Monastery, the Battle of Erastfer in 1702 and lake operations on Peipus. In 1704 both units under Colonels Yury Vestov (631) and Vasily Polibin (695) participated in the siege and storm of Dorpat where Vestov was killed and his unit went to Major Roukh. Both regiments then remained in the occupied Dorpat as garrison troops and converted into soldiers in 1706. Ex-Vestov's *streltsy* became garrison soldiers in Narva, the regiment of Kirill Naryshkin.

The two Novgorod *streltsy* regiments (one local and another ex-Moscow) heavily suffered in 1700 at Narva where one of the colonels, Zacharia Vestov, died. Later in 1701 all their men were united in one regiment of Colonel Miron Grigorievich Baishev and his son Lieutenant-Colonel Fedor Mironovich Baishev. Baishev's regiment was based in Ladoga and took part in the operations of Major-General Peter Apraksin in Ingria, including the siege of Narva in 1704. They then converted into soldiers and took part in the siege of Vyborg in 1710.

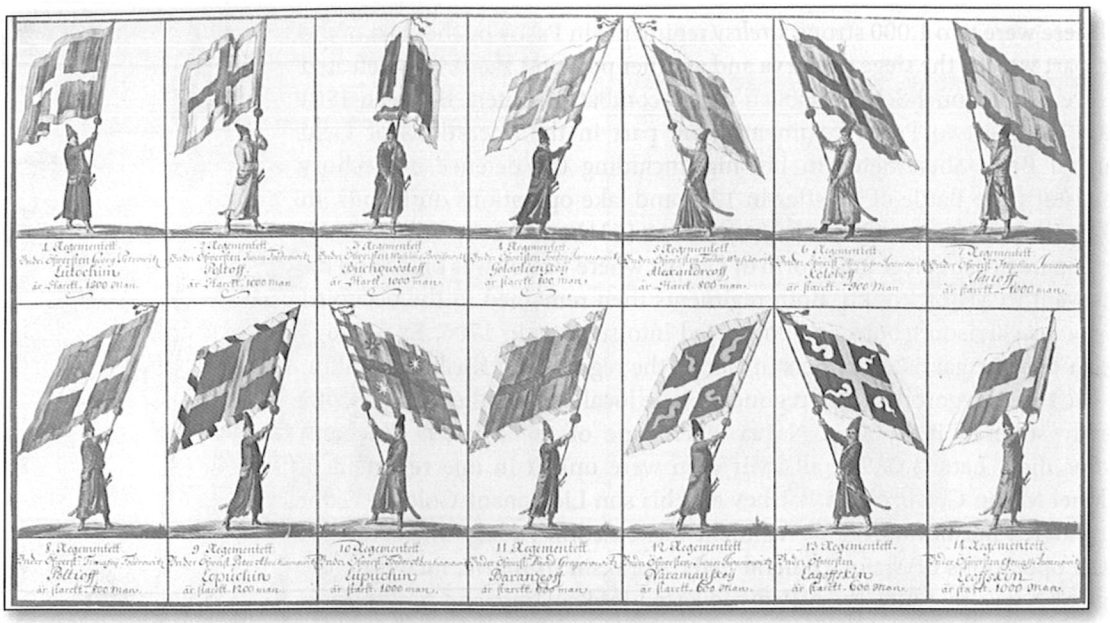
The Smolensk *streltsy* regiment of Colonel Dmitry Kakhovsky in 1704–1706 was part of Patkul's Russian auxiliary corps in Poland-Saxony and shared its defeat at Fraustadt in February 1706.

Not only old provincial *streltsy* survived but new units were raised during the war. In 1702–1703 six new 1,000-strong regiments (Nechaev, Protopopov, Koshelev, Annenkov, Postelnikov, Danilov) were created out of former Moscow streltsy which effectively meant their amnesty after the 1698 revolt. Of these six newly formed Moscow units Colonels Ivan Nechaev and Mikhail Protopopov were in the auxiliary corps sent to Lithuania in 1703, where they were defeated in the Battle of Salaty; this gave Swedes numerous items for the trophy collection that is nowadays stored in Stockholm Army Museum. Nechaev then took part in another unlucky battle at Kletsk in 1706.

The *streltsy* of Colonel Grigory Annenkov served in Baturin and were ethnic Russian 'guards' to Hetman Mazepa as opposed to his Cossacks; around 1705–1706 they were converted to soldiers. In 1708 when Mazepa ran to the Swedes and garrison of Baturin mutinied, Annenkov's men took part in storming the place where they had served for so many years prior to that. In 1711 Annenkov became Brigadier, and a company of his regiment successfully defended fortress Belaya Tserkov against Poles and Tartars.

Despite temporary revival in early 1700s, eventually most of the *streltsy* were either disbanded or converted to soldiers. Over time those who were not fit for service became merely part of the taxpaying townsfolk with no military importance. Others, young and fit, were converted into soldiers, which meant higher pay, but no social or tax privileges that *streltsy* used to have before. These ex-*streltsy* units were now staffed with recruits like the rest of the army, thus their social and territorial coherence was now broken.

The soldier regiments were created in Russia in 1630s as 'Foreign infantry' (*polki inozemnogo stroya*) modelled after European foot. By 1699 they were staffed with peasant draftees recruited from certain territory; many were ex-

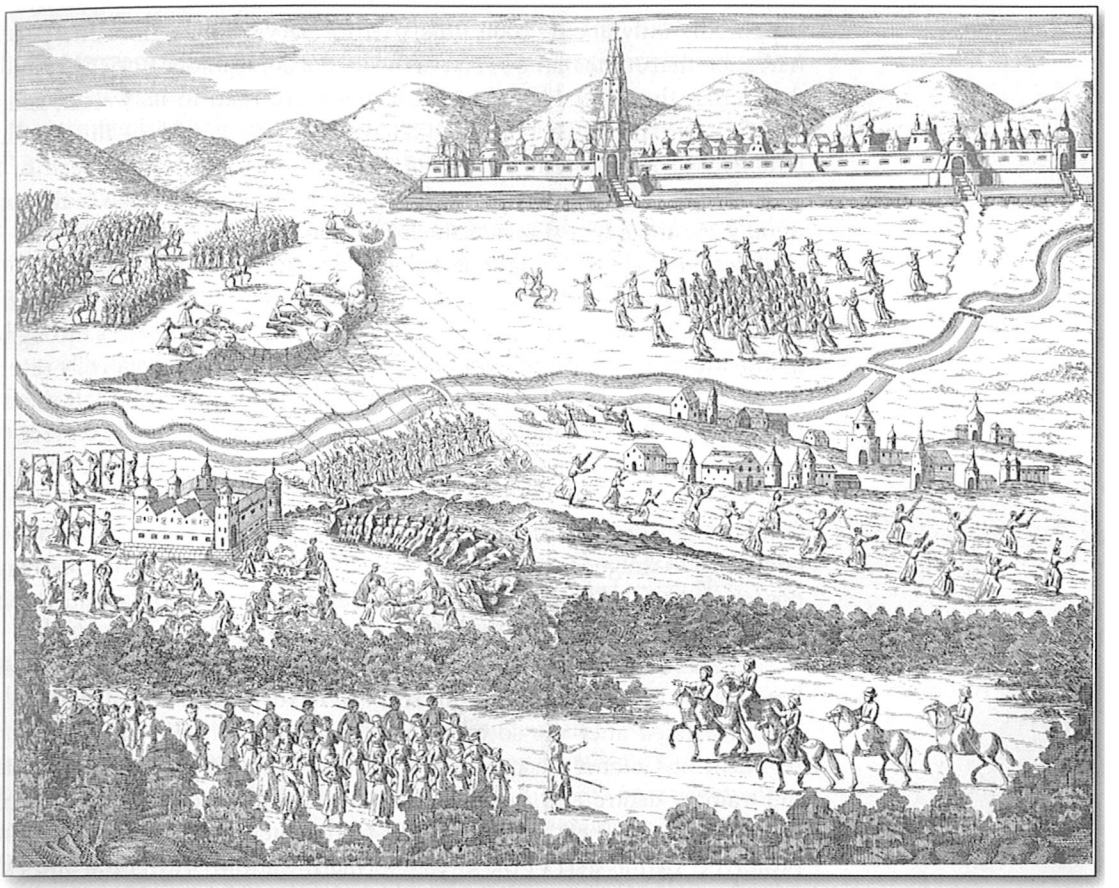


11. Ensigns of the Moscow Streltsy. 1673. (Erich Palmquist (1650–1676))

streltsy, too. The units were called settled (*zhiloy*), for they were assigned to their specified locations and basically performed garrison duties. The soldier infantry was mainly concentrated along south-west, southern and south-east regions; many settled in Azov to man construction of the new naval base. Only a few of them eventually became proper field units in the new army. For example, the regiment of Alexander Sharf in Kazan took part in many campaigns in Livonia and Ingria and was given the name Olonetsky. Or Belgorodsky regiment that was created in 1697 out of chosen men from Preobrazhensky and Semenovsky and served in all the field campaigns against the Swedes under Colonel Savva Aigustov. The majority remained in garrisons and only sent their selected men to refill the field army; they also took part in fighting the rebellions in their areas or fighting Turks in 1711. These soldier regiments as a rule were of little use for Tsar Peter's aims. Their officers were sent to Moscow in 1700 to train recruits in the new regiments, however they were found not fit for field service.

The elite among the soldier infantry were the so called Chosen (*Vybornye*) Soldier regiments in Moscow.[9] The First Vyborny regiment was raised in 1656 and by 1699 was named Lefortovsky after its Swiss commander in 1692–1699, Peter's friend General Franz Le Fort (1656–1699). The Second, created in 1656/57, was known as Butyrsky for it was based in Moscow district Butyrka. Between 1686 and 1699 it was commanded by Scotsman and Peter's tutor in military affairs General Patrick Gordon of Auchleuchries (1635–1699). Thus *vybornye* were probably the closest to European infantry. Third Vyborny between 1693 and 1700 was the name for the two ex-*poteshnye* and future Guard regiments. Both *vybornye* in peacetime were cadres that in

9 A.V. Malov, *Moskovskie vybornye polki soldatskogo stroia v nachalnyi period svoei istorii. 1656–1671 gg.* [Moscow chosen soldier regiments in early years of their history, 1656–1671] (Moscow, 2006).



12. General Patrick Gordon suppresses revolt of Moscow ***Streltsy*** in 1698 near Voskresensky (New Jerusalem) Monastery on the River Istra. 1700. (Johan Georg Korb (1672–1741))

wartime, for example in the Crimea and Azov campaigns, were inflated with four to six soldier regiments from other provinces.

Cavalry

The old-style cavalry included several categories. The feudal levy of the nobility (*pomestnaya konnitsa*) enjoyed the highest status among other horse. They were noble landowners who received uninheritable land with serfs as compensation for their service. They lived on the income from their land and were obliged to equip themselves with horse, saddle, provisions, costume, and weapons. The nobles formed units according to their territorial corporations and only gathered when called out to war or to their shift in guarding the southern frontier, that is, they did not have regular training. This system of feudal levy had worked since the 15th–16th centuries but by the late 17th it was an anachronism.

The Moscow nobles were most wealthy and privileged and according to the old tradition formed the Monarch's Regiment (*Gosudarev Polk*) that accompanied the Tsar to war; the 1700 campaign was the last occasion when this corps gathered. In 1700 their theoretical strength was about 6,200 but

supposedly only about 2,000 took part in Narva campaign.[10] The popular narration that at the Battle of Narva the feudal horse under Boris Sheremetev fled across the River Narov, and lost many drowned in its waters, sounds questionable since it is known that Sheremetev retreated along the riverbank and crossed it upstream in Syrenets (Vask-Narva) far out of reach of the Swedes. The rosters of Moscow nobles from 1700 and 1701 show a difference of only 256 men, which means the loss of the corps was not significant.

Another corps of feudal horse that took part in the Battle of Narva was Bogdan Korsak's regiment of Smolensk nobles amounting to about 1,000 men. This unit subsequently took part in the war in secondary theatres throughout all the war years, retaining its feudal nature. Smolensk was relatively recently, in 1654, reconquered from Poland-Lithuania and its nobility retained its privileges, Polish denomination *szlachta* and some traditions of service.

The provincial feudal horse was organised into regiments and hundreds (*sotnya*) or companies of 70–140 men. By 1700 there were 1,217 men in feudal companies in the Novgorod region; later on some of them were converted to dragoons or retired, but a few feudal horse units (chosen noble companies, *vybornye dvoryanskie roty*) staffed with the most wealthy nobles kept on campaigning as late as 1710.

Reiters (*Reiters* or *Reuters* in German, *Reitary* in Russian) were Western type cavalry first introduced in Russia back in 1632 when one unit was raised and disbanded after the so-called Smolensk war of 1632–1634. The *Reiter* regiment of Colonel Isaac von Bukowen was created in 1649 and became the training centre and cadre for six more *Reiter* units during next Polish war 1654–1667. Their armament and tactics then followed their European prototype. By the start of the Great Northern war only Novgorod and Pskov mobilised their troops. Three *Reiter* regiments (total strength 4,991) were in Novgorod in 1700, their personnel were noble landowners too but unlike feudal horse companies were not wealthy enough to equip themselves and were issued weapons etc. Their training in peacetime was limited to sessions once a year in autumn. Within *Reiters* there were elite sub-units of lancers (*kopeischiki*), totalling 630 men. One level higher in standing as compared to lancers and *Reiters* were hussars, modelled after famous Polish winged hussars and created in the 1660s; one regiment of hussars 477 men strong survived in Novgorod by 1700, in other provinces there were hussar companies.

The hierarchy of feudal cavalry in descending order – feudal horse companies, hussars, lancers and *Reiters* – only reflected their varying social status and wealth. They were all landowners and nearly all noble, and all were irregular in terms of the amount of time they spent without their units. As far as tactics, weapons or uniforms were concerned, by 1700 there is no data about them and supposedly there was little difference between them. In

10 V.S. Velikanov, 'K voprosu ob organizatsii i chislennosti russkoi armii v Narvskom pokhode 1700' [About the organisation and quantity of the Russian army in the Narva campaign 1700]. Proceedings of the *Voina i oruzhie. Novye issledovaniia i materialy. Trudy Vtoroi Mezhdunarodnoi nauchno-prakticheskoi konferentsii 18–20 maia 2013 goda* [War and Weapons. New studies and materials. Works of the 2nd international conference, Artillery Museum, 18–20 May 2011] (SPb: VIMAIViVS, 2011), Vol. 1, pp. 130–143.

February 1702 the Tsar approved Sheremetev's request that the Cossacks of Colonel Murzenko and newly drafted *Reiters* and lancers were issued with a fusil and pair of pistols.

The provincial nobles were as a rule poor, often unable to field a horse and unable to serve far from their land. In August 1702 Major-General Peter Apraksin noted that feudal horse and *Reiters* in his command were not trained and did not have horses. Major-General John Chambers made a similar comment about the lack of order and mounts in the *Reiter* (ex-horse) regiment of Ivan Nazimov in 1705 in Narva.

In 1701 peasant Ivan Pososhkov, who had written several essays about various aspects of life in Russian society, presented a manuscript titled 'On Military Behaviour' to Field Marshal Golovin. Among other, often naïve, things he wrote about the low esteem he had of the noble cavalry. Although Pososhkov was in no way a military professional, he probably broadcasted a popular opinion: they ride skinny horses, have blunt sabres, lack money and clothes, and have no skill in arms. They care not about killing the enemy but about going home; they pray to be slightly wounded and get leave and a money reward for the wound. Many tend to hide in the bush during the fight and only go out after it all ends. Pososhkov heard from many nobles: 'Pray heaven to serve the Great Lord, but keep sabres in sheaths'.[11]

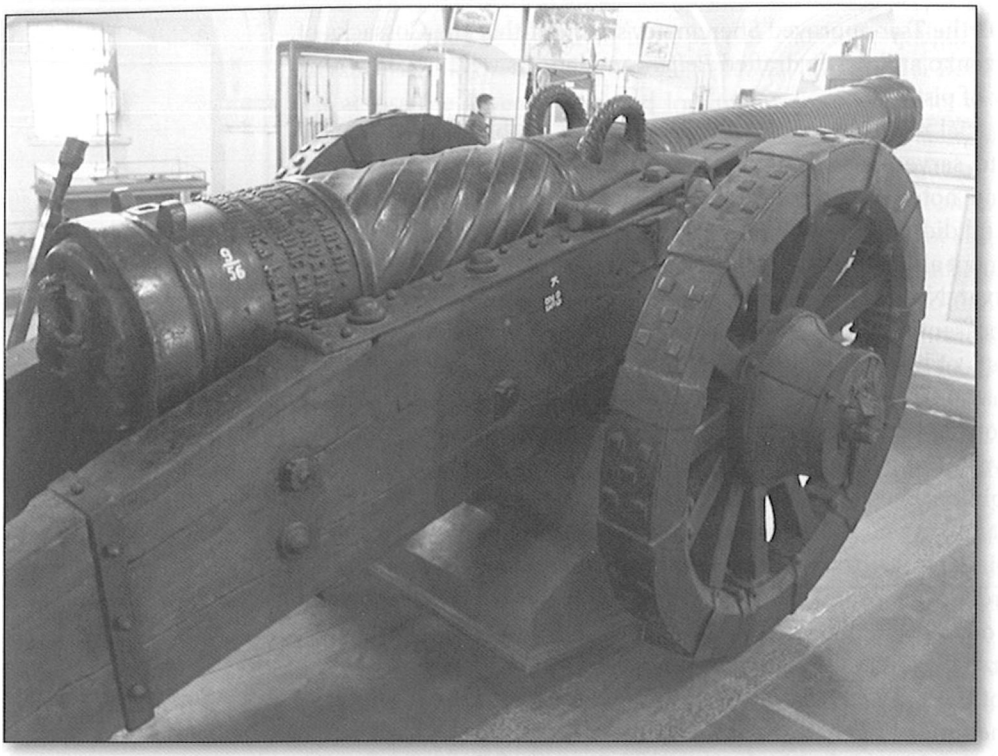
Because of these deficiencies, the government tried to make the best out of them by merging different units, downgrading feudals to *Reiters*, bringing in more battle ready men from other units and eventually transferring the majority of noble irregulars to the dragoons. The history of the regiment of Colonel Moisey Murzenko illustrates all the transformations as well as the mosaics of social and territorial groups serving in the noble cavalry. The unit was raised in 1700 out of Smolensk nobles and *Reiters*, since 1701 was staffed with Novgorod Cossacks, in 1703 consisted of nobles, *Reiters*, Cossacks and youth from Novgorod and Pskov. In 1707 this last of all *Reiter* units in north-west Russia converted to Olonetsky dragoons.

Artillery

Russian monarchs paid special attention to artillery in the 16th and 17th centuries, so by the time of Peter's arrival this arm had a long and rich history. Artillery personnel were free individuals whose service was lifelong and who received money pay, bread and salt; as a rule they inherited their trade from their family members, lived in common settlement, held their private business and constituted special strata, like *streltsy*. Classification of artillery ranks included various sorts of servicemen who specialised in different tasks – *pushkari* (gunners), *zatinschiki* (wall gunners), *vorotniki* (served at city gates). Regular reviews included shooting contests where gunners got prizes (foreign woollen clothes) for their accuracy.

The regimental artillery was standardised as early as in 1670s – the 2 pdr bronze cannon were cast in many hundreds and issued to both soldier and

11 I. Pososhkov, 'O ratnom povedenii. Donesenie boiarinu Fedoru Aleskeevichu Golovinu, podal Ivan Pososhkov. 1701 goda' [On military behaviour. Report to boyarin F.A.Golovin, 1701] in *Sochineniia Ivana Pososhkova* [Writings of Ivan Pososhkov] (Moscow, 1842), pp. 287–288.



13. 40 pounder cannon. Cast in Moscow in 1591 and named ***Svitok*** for its twisted ornamentation, it was brought to the siege of Narva in 1700 and captured by the Swedes there. Barrel 458 cm long, 4,761 kg weight, 180 mm bore. Artillery Museum, St. Petersburg. (Author's photo)

streltsy regiments.[12] In 1696 every Moscow streltsy regiment setting off to Azov had two 2 pdr guns with 50 shots each.

Cossacks

The Cossack host in the basin of River Don originated in the 1500s. It was an autonomous military community of Russians on the border with Oriental neighbours and adversaries, rather than ethnical group. Over time they started serving the Tsars, receiving money pay or natural benefits like textiles. Their military leaders, *atamans*, were elected by the men from amongst themselves. The Don lands were out of government's control and many runaway serfs from central Russian provinces escaped to Don to join the host, for the old tradition said that there was no extradition from Don. The Moscow authorities steadily worked to lessen the Cossacks' self-rule and privileges. This resulted in the 1708 Don rebellion led by Kondraty Bulavin: the Cossacks killed Prince Dolgoruky sent from Moscow, defeated the Smolensky infantry regiment sent to suppress them, attacked Azov, and took Tsaritsin, but eventually the revolt was extinguished. Bulavin was killed by his fellows and some thousand Cossack families with *ataman* Nekrasov fled to land controlled by Crimean tartars. These Nekrasov Cossacks then became hostile to their homeland for centuries, and as subjects of the Ottoman

12 A.N. Lobin, 'Artilleriia moskovskikh streletskikh polkov v 1670–1680-kh gg.' [Artillery of Streltsy regiments in the 1670s–1680s] in *Istoriia voennogo dela: issledovaniia i istochniki* [History of military science: research and sources], 2012, T. II, pp. 1–41 <http://www.milhist.info/2012/07/23/lobin> (accessed 4 April 2017).

Empire took part in many wars against Russia. Nevertheless, Don Cossacks were Russia's main irregular force, they participated in nearly all campaigns of the Great Northern war, including those in Finland and in Sweden in 1710s, when other irregulars were not employed.

Yaik Cossacks also took part in Great Northern War operations, although their duty was to protect eastern and southern frontiers. This host originated in 1591 in the South Urals, where some Don Cossacks resettled to the River Yaik.

The Terek host, serving in the North Caucasus since 1577, also contributed Cossacks to Petrine operations. These were relatively few in the ranks of tsarist irregulars. In January 1708 Brigadier Shidlovsky commanded irregulars of the army that included 2,690 Don Cossacks, 1,800 Ukrainians and Kalmyks and 516 Yaik and Terek Cossacks.

There were also local Cossacks in Russian towns (*gorodovye kazaki*) who performed mainly garrison duties and did not have any self-rule or autonomy like Cossacks of Don, Dniepr, and Yaik. The town cossacks were free individuals, and although they were not noble they received land as compensation for their service. In Novgorod about 1,000 cossacks enlisted in *Reiters*, thus constituting the fourth part of all Novgorod *Reiters*.

14. Ukrainian Cossacks. 17th century. (Unknown artists)

In the years discussed, the lands of modern Ukraine belonged to different countries, so Ukrainian troops had varying origins and subordination. In period Russian documents the land was called Little Russia (*Malaya Rus* or *Malorossiya*) and the people were often called *Cherkasy*. The term Ukraine existed too, initially it referred to the border region between Russia and Poland-Lithuania. This autonomous region within Russia since 1654 was known as the Hetmanate ('*Hetmanschina*') on the left bank of the Dniepr with Kiev on the right bank. It was governed by Hetman Ivan Mazepa and after the latter defected to the Swedish in 1708, the new loyalist Hetman was Ivan Skoropadsky. The Hetman's troops and lands consisted of two parts: Zaporozhian Cossacks and the Cossacks of Hetmanate.

The Zaporozhian host was based on the lower River Dnieper (*za porogami*, literally 'below the river rapids') around their settlement Sich, it was largely a self-governed society that was often at rivalry with both Hetman and the Tsar; its leader by 1709 was *ataman* Konstantin Gordienko.

Besides that, since the mid 17th century there were Ukrainian troops under direct Russian administration known as Sloboda Cossacks, they were Ukrainian Cossacks from Polish territories who resettled to Russian lands in and around the towns of Kharkov, Akhtyrka, Sumy, Izyum and Ostrogozhsk. All five regiments went to war in 1701, but by the end of the year the majority, being horseless, were sent home. Only the Izyum regiment with some chosen men from other units with Colonel Fyodor Shidlovsky remained with Sheremetev; after successful but exhausting campaigns of 1701 and 1702 they were given leave too. Their next action was the defeat of Bulavin rebels and small war operations during Swedish invasion of 1708–1709. In 1711 Sloboda Cossacks defended their towns against Tartars, Poles and Zaporozhians.

On the right bank of the Dnieper were Cossack subjects of the Polish-Lithuanian Commonwealth; in 1702, led by Samoilo Samus and Semyon Paley, they rebelled with the aim of joining left bank Cossacks under the rule of the Tsar. These were based in the towns of Belaya Tserkov, Fastov, Boguslav, Korsun, and Braclav. Formally they were mutineers of Russia's ally, so Russia could not officially welcome their rebellion. Nevertheless, given the ally was unreliable, the places were retained under Russian control until 1711.

Hetmanate forces in turn comprised the Hetman's household troops, six to eight mercenary regiments and around 10 so-called 'Registry' or 'Town' regiments. The latter units were territorial, based on the towns of Gadyach, Pereyaslav, Kiev, Lubno, Mirgorod, Nezhin, Poltava, Priluki, Starodub, Chernigov. A regiment (*polk*) was a territorial administrative structure. Every town that was a regiment's centre had smaller towns around which fielded companies, sub-units called *sotnya* (literally, 'hundred'). Composition of regiments was not universal across the host, so their strengths varied from 500 to several thousand men depending on the size of regimental territory.

The mercenary Cossack regiments were either foot (*serdyuki*) or horse (*kompaneitsy*). They recruited volunteers paid by the Hetman and were not territorial.

Their combat value was considerable in small war, in ravaging enemy country, or against similarly irregular Poles, Lithuanians or Tartars. During 1690s Cossacks participated in many campaigns against Tartars and Turks. Their most successful action was in 1695, taking Turkish fortresses on the lower Dniepr with the joint force of Boris Sheremetev's Russian troops and Hetman Mazepa's Cossacks. Kazikermen was besieged, bombarded, and taken by storm; survivors surrendered in the citadel and three other places gave up afterwards.[13] This means that Cossacks had experience in siege warfare.

Mazepa with his force was sent in 1704 to Poland to support Augustus and suppress anti-Saxon parties. However they could do nothing to the regular Swedish army as a number of occasions showed. For example in operations around Lyachovichi in spring 1706 the place was occupied by Cossack Colonel Ivan Mirovich and besieged by Swedish cavalry Colonel Creutz. Garrison sorties did not help to raise the siege. Nor could the relief force break through

13 A.V. Bagro, *Ukrainskoe kazachestvo i pervyi Azovo-Dneprovskii pokhod* [Ukrainian Cossacks in the first Azov-Dniepr campaign] (PhD Thesis) (SPb, 2015).

– it was defeated by Swedes not far away, in the Battle of Kletsk. Creutz refused to grant honourable capitulation and all the Cossacks were taken prisoner and sent to Sweden, where their Colonel Mirovich died in captivity.

Zaporozhians were sent to the Livonian front in 1701 but proved useless; they deserted and hired themselves to the Lithuanians to participate in their ongoing civil war. However, Hetman's mercenary and registry Cossacks still took part in the defence of Pskov Pechory monastery in 1701. A small detachment of Zaporozhians served in the St. Petersburg garrison.

Mazepa's treason in 1708 did not lead to the switching of most of his subjects. Lower ranks almost universally remained loyal to Moscow; higher ranking elites were more inclined to change sides but in the end many returned back to the Tsar and even Mazepa, after seeing his move was not too popular, offered to return. Zaporozhian Cossacks of Gordienko who had long been unhappy with Russian policy of centralisation changed sides in winter 1709 and took part in Swedish operations near Poltava. Those who survived Russian retaliatory actions against their positions on the Dniepr in spring 1709 and who fled from Poltava ran to Bender, along with Charles. Unlike in 1708–1709, the Ukrainian population appeared more uncertain in 1711. Several places welcomed the invading force of Tartars, pro-Swedish Poles and Zaporozhians; the majority remained loyal but Russian administration did not rely on them much. Ukrainian Cossacks did not take part in Great Northern War operations thereafter.

The government also employed Russia's non-Russian ethnic irregular troops, the Kalmyks: the Oirat tribe, Buddhist and nomadic, which migrated from Dzungaria (West Mongolia). In the early 17th century they settled within Russian realms in the steppes of the lower Volga between the North Caucasus and Southern Urals, and created their khanate. The Kalmyks appreciated the Tsar's rule and were obliged to defend his borders against Crimean Tartars and other neighbours. Some Kalmyk families broke away from the khanate and joined the Don Cossack host, others were baptised and settled in Sloboda Ukraine near Chuguev after the 1696 Azov campaign, and some settled in Kursk. Natural-born horsemen and descendants of the Mongol Empire, Kalmyks were professional in long range cavalry operations, reconnaissance, raids and ambushes; their Asiatic appearance was as frightening as their way of waging war. Khanate leader Ayuka-khan ruled from 1669 until 1724 and during most of that period he remained loyal to the Tsars. Kalmyks, together with Zaporozhian and Don Cossacks, fought extensively against the Crimeans in the 1670s–1690s. Starting in 1701 they were in Sheremetev's horse although not in big numbers, for example Chuguev Kalmyks were but 60 in 1701. Irregular forces in the period documents were often described as 'Cossacks, Kalmyks and Tartars', that is they operated together and as a rule in the vanguard. A relatively large force of Kalmyks joined Russian troops in 1706 when Menshikov campaigned in Poland – besides his 17 dragoon regiments he had 4,000 Don Cossacks and 3,000 Kalmyks, according to data compiled by Charles Whitworth.[14] On 14 October 1706, in action at Widawa, Kalmyks rushed in front of the Russian dragoons

14 *Sbornik IRIO*, T. 39, (SPb, 1884), p. 296.

and overran pro-Swedish Polish horse and dragoons, killing many on the spot, taking two German dragoon officers and slaughtering others after the fight was over per Menshikov's order.[15] In the Battle of Raevka on 20 September 1708, in a dragoon corps of General Bauer, 600 Kalmyks retreated before charging Swedish cavalry led by the King in person; the Swedes were thus brought under a flanking attack of regular dragoons and a mass cavalry melee ensued. As a part of the Flying Corps they fought Lewenhaupt at Lesnaya in autumn 1708, first fighting in the advance guard and then chasing and finishing the fleeing Swedes in the woods. In 1709 Peter requested that 3,000 Kalmyks joined him in the Poltava operation, but they only arrived under the command of Ayuka's son several days after the battle. Still, there were some Kalmyks among the Don Cossacks at the Battle of Poltava. An eyewitness on Swedish side, pastor Daniel Krman, wrote in his diary albeit somewhat exaggeratedly that pro-Swedish Zaporozhian Cossacks on the left flank were confused and routed by terrible yell of 'many thousands of Kalmyks'.[16]

Besides sending troops to the Swedish front, Ayuka led his horde against Crimean ('Kuban') Tartars and rebellious Don Cossacks in the North Caucasus in 1708. During the Pruth Campaign in 1711, in order to distract the latter from the war against Russia, 20,000 Kalmyks ravaged the lands of Kuban Tartars in a way that resembled the medieval total war of their ancestor Chingiz Khan.

Taking slave prisoners was common business to Kalmyks and they did so even on Russian lands in 1708, which raised reasonable questions from Peter and his government. Their behaviour in Poland in 1706 caused many protests and a Kalmyk *ataman* was hanged for marauding in Sandomierz. James Bruce acknowledged in a letter to Brigadier Volkonsky in 1707: 'It is well known to everyone that Kalmyks and Cossacks do plunder and that it is difficult to control them in comparison to dragoons. You won't be blamed if they do something without your order.'[17]

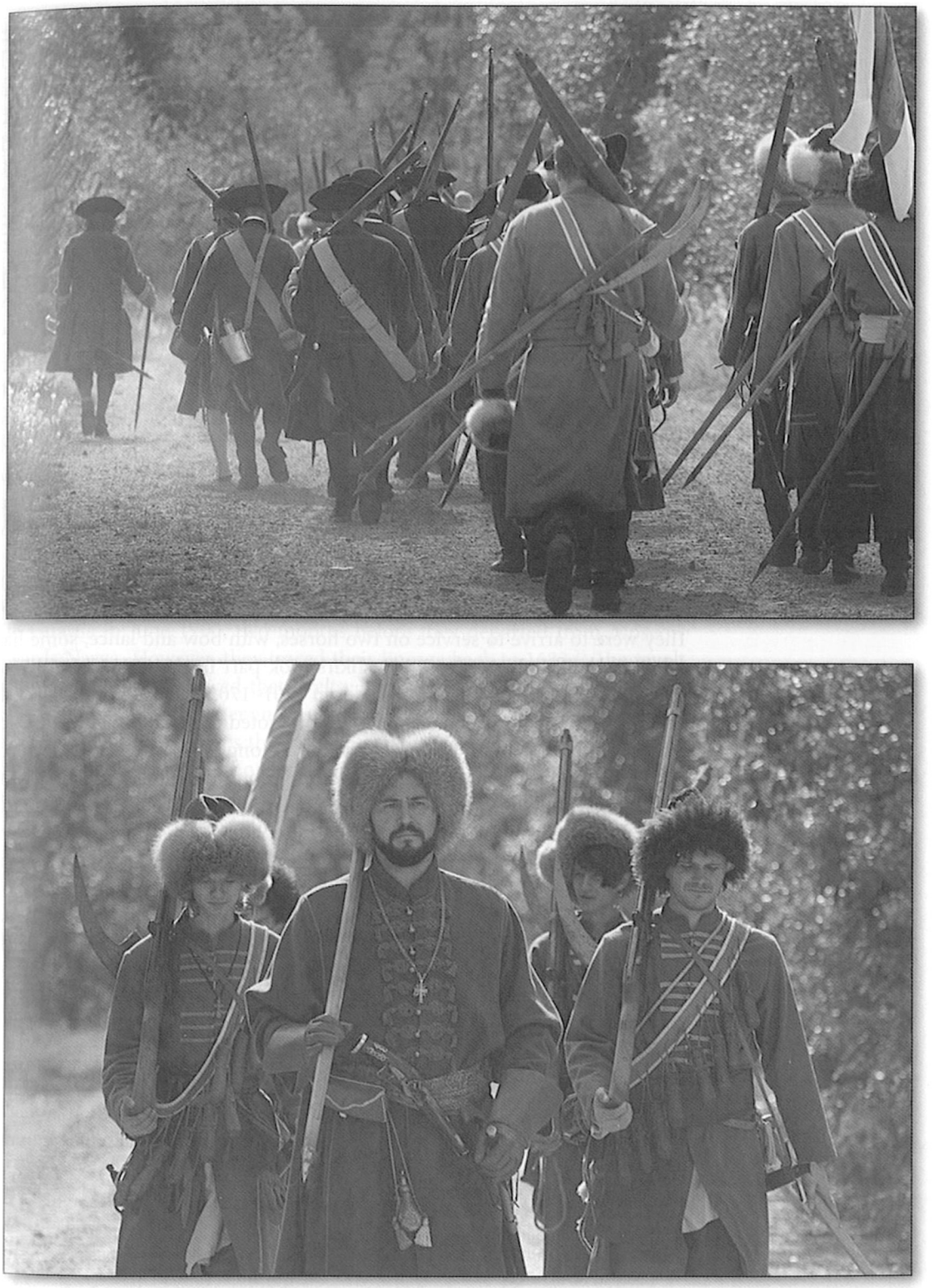
The combat qualities of Kalmyks – as well as the effect they had on morale – were acknowledged by allies and foes. King Augustus in 1706 begged the Tsar to lend him 4,000 Kalmyk horsemen; a Russian envoy in Denmark reported in 1708 that Swedish officers travelling from the army to Stockholm commonly said that the army suffered from the parties of the Tsar's troops, especially from Kalmyks and Cossacks 'who don't let them sleep enough'. There was even a myth (introduced by Krekshin) that in 1708 the Tsar used Kalmyks as barrier troops in the rear who were to stab anyone who retreated. Prince Boris Golitsyn, Governor of Kazan, in his letter to the Tsar emphasised the Kalmyks' image in the media of the period: 'I think it is for better that they were late. If they arrived at the [Poltava] battle, even if there was no help from them, much success would be ascribed to them in curants [newspapers].'[18]

15 *Pisma i bumagi*, 4, p. 1193.

16 D. Krman, *Itinerarii* (translated by L.M. Popova, M.I. Tsetlin) in *Voprosy istorii*, 1976, 12, p. 109

17 *Arkhiv general-feldtseikhmeistera Iakova Vilimovicha Briusa* [Archive of General Feldzeugmeister Jakob Bruce] T. 3, Letters of J. Bruce 1707. (SPb, 2006), p. 128.

18 *Pisma i bumagi*, 9, part 2, p. 989.



15. Reenactors of the late 17th century infantry from Saransk, Russia. (Photos by Igor Georgievsky)

A curious detail: Kalmyks rode horses but they also used camels to carry cargo. These beasts of course impressed the Europeans of those days which led to an improbable anecdote about an action near Pskov soon after the Battle of Narva, recorded by English Captain John Perry: 'the Cullmicks, with several of these Dromedaries in the Front, were order'd in the Attack, who, when they came near, so affrighted the Swedish Horse, that they gave way and broke their Ranks.'[19] There is a Swedish account of how in 1703 a detachment from Dorpat defeated a party of Yaik Cossacks and Kalmyks of Colonel Rukavishnikov and captured the Colonel's pack camel.[20]

The Bashkirs were Turk muslim people living across a vast West Urals region.[21] Their integration into Russia started in 1554 when Tsar Ivan IV ('The Terrible') conquered remnants of the Golden Horde, the Khanates of Kazan and Siberia, and built the town of Ufa on their lands. The Bashkirs accepted the rule of Moscow voluntarily, although tensions invariably existed and they rebelled against colonisation in the 1660s and 1680s and then in the 1700s. Between 1704 and 1711 Bashkirs on their lands rebelled against the local Russian administration which introduced new taxes and abused their landowning rights. It kept busy those few Russian troops that were available in the region and eventually the government twice involved Kalmyks to suppress the rebellion in their cruel nomadic way.

Bashkir elites, *tarkhany*, were exempt from taxes and in return were obliged to go into the Tsar's military service and lead their lower-ranking compatriots. They were to arrive to service on two horses, with bow and lance, some had sabres and rifles. In 1680s–90s Bashkirs took part in the Crimea and Azov campaigns; they fought against Swedes in 1701–1705 and then in 1708–1710; many ordinary Bashkir horsemen were promoted to *tarkhany* as reward for their service. In spring 1701 1,000 Bashkirs, among other irregulars, were sent to the corps of Sheremetev. They lacked provisions and money pay and many lost their horses, so by the end of the campaign the better half of the Bashkirs was left in the army and the horseless half sent home. Subsequently they were present in the army in hundreds or dozens only, participating in campaigns in 1702, 1703, and 1705. In 1703 the advance guard of Sheremetev's corps on his march to Wesenberg (Rakvere) consisted of 458 Don and Yaik Cossacks, Tartars, Bashkirs, and Ufa *streltsy* all together. In 1705 they took part in Battle of Gemauertshof and lost 10 men. Despite ongoing rebellion, 1,000 Bashkirs upon request in 1708 arrived in St. Petersburg, participated in the 1709–1710 siege of Riga, and then went home.

Tartars started serving Moscow as early as the 15th century and a major inflow occurred after the conquest of the Kazan and Astrakhan Khanates in the 16th century. Tartars from Astrakhan, 473 men led by their nobles – *murza* – joined Shetemetev's army in 1701 as a part of the Astrakhan irregulars

19 John Perry, *The State of Russia, Under the Present Czar* (London, 1716), p. 277.

20 C. Kelch, *Lieflandische Historia oder Kriegs- und Friedens-Geschichte. Continuation (1690–1706).* (Dorpat, 1875) p. 336.

21 R.N. Rakhimov, 'Bashkiry v Severnoi voine 1700–1721 gg.' [Bashkirs in Northern war 1700–1721] in *Istoriia bashkirskogo naroda v 7 t.* [History of the Bashkir people, in 7 volumes] (ed. M.M. Kulsharipov) (Ufa: Gilem, 2011), Vol. 3, pp. 157–160.

and *streltsy* of Boris Kareitov. They kept serving in Ingria along with other irregulars from lower Volga (*nizovye*) at least until end of the 1703 campaign when many had lost their mounts – the best they could find were local Finnish horses. In general Field Marshal Boris Sheremetev was very pleased with his *nizovye* irregulars, found them very helpful in his operations and begged the Tsar to give them leave the sooner the better, so that they had time to return from home by the next campaign. 'Tartars and Kalmyks are very needed for the new year,' he wrote on 10 October 1703; Cossacks from Don, Yaik and Ufa too, though only chosen ones which was not the case in previous years; horse *streltsy* from Tsaritsin and other lower Volga places were most advantageous as they were disciplined and had firearms; the highest praise went to Astrakhan horse *streltsy* of Ivan Bahmetev and Dmitry Bahmetev.[22] Ivan Pososhkov in his treatise also highly rated *nizovye* horse *streltsy* for they were very skillful in sharpshooting from horseback and were far more warlike and efficient than the ordinary horse.[23] In 1709 small troops of Tartars were attached as non-combatants to dragoon regiments.[24]

The New Army

Guards

The two regiments – Preobrazhensky and Semenovsky – were first named Life Guards in June 1700, two months before they departed from Moscow towards Narva. However, they traced their lineage back to 1683.[25] The revolt in Moscow in 1682 showed that *streltsy* and *vybornye* were not loyal to the young prince and his mother and it must have been obvious that Peter needed some personally loyal corps that had no connections to other military units of those days. The hierarchy of court services was rather vast and Prince Peter then had at his disposal court servants *spal'niki* (attendants in rooms) in the village of Preobrazhenskoye, the Moscow suburb where he had resided since 1683. Their court uniforms were green and after they were assigned for the Prince's amusement (*poteshnye* – adjective, pl. from verb *poteshat'* – to amuse, entertain) they added gold and silver laces to their existing coats.[26] Peter, unlike his brother Ivan, had been fond of the military since childhood and wanted his men to amuse him with everything martial, so eventually *poteshnye* became a synonym for the military group around Peter. Over time their numbers increased when other categories of court servants became involved in the play;

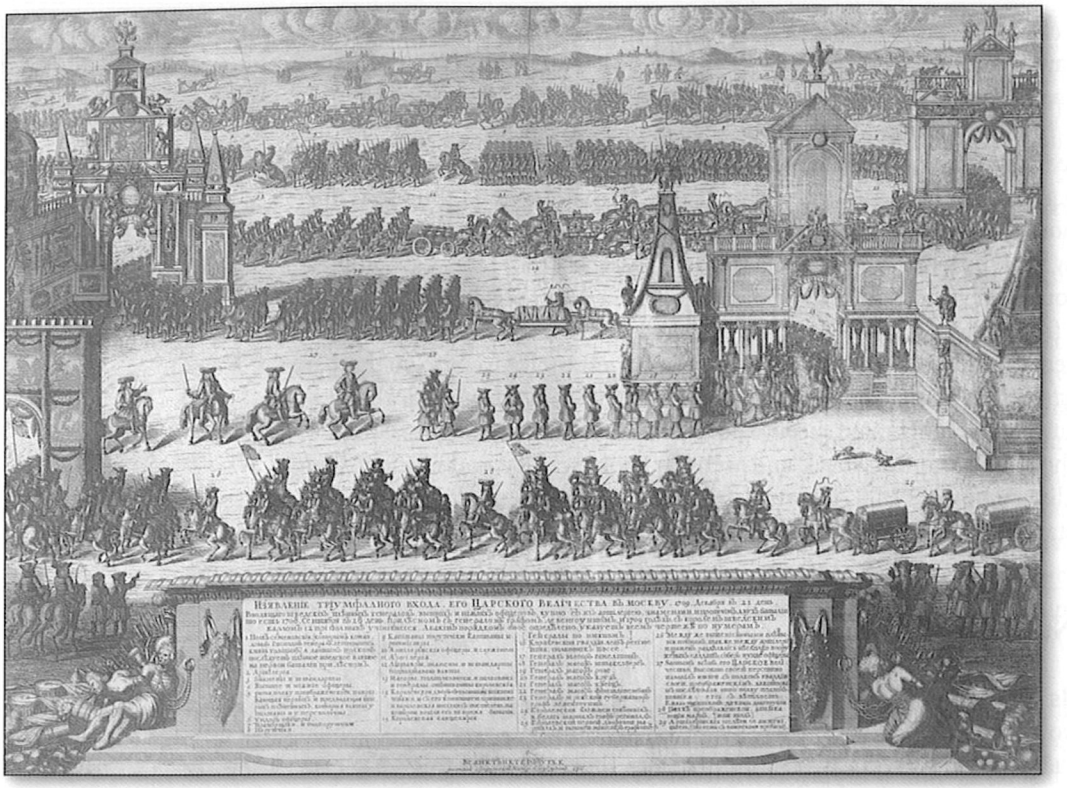
22 B.P. Sheremetev, *Pisma k gosudariu imperatoru Petru Velikomu* (SPb, 1778), T. 1. pp. 227–228.

23 I. Pososhkov, (1842), pp. 269, 282

24 P.A. Krotov, *Bitva pri Poltave* [The Battle of Poltava] (SPb, 2009) p. 164.

25 The most trustworthy view on factual emergence of poteshnye and guards: P. Dirin, 'Poteshnye polki Petra Velikogo' [Amusement Regiments of Peter the Great] in *Russkii arkhiv* [Russian archive], 1882, book 3, Vol. 5, pp. 5–26; P.O. Bobrovskii, *Poteshnye i nachalo Preobrazhenskogo polka. Po ofitsialnym dokumentam* [Amusement troops and beginning of the Preobrazhensky regiment. As per official documents], (SPb, 1899).

26 Research of *poteshnye* uniforms in connection with costume of court services and *vybornye* regiments: R. Palasios-Fernandez, 'O proiskhozhdenii tsvetov petrovskoi leib-gvardii' [On the origins of the colours of Petrine Life Guards], in Tseikhgauz, 1996, 5.



16. Triumphant parade in Moscow after victories of Lesnaya and Poltava, 1 January 1710. 1711. (Alexey Zubov (1683–1751))

often they were boys like Peter but many were older, like Sergey Bukhvostov, court groom, who must have participated in games before, and only in 1686 at the age of 27 was officially transferred to the *poteshnye* artillery (contrary to the popular belief, he was not 'the first soldier', who enlisted in 1683). In 1688 court falconers in their blue coats and based in the neighbouring village of Semenovskoye were transferred to the *poteshnye* as well. In 1689 men from both locations showed their loyalty when Princess Sofia plotted a failed assassination of Peter. It was as late as 1690–1692 that *poteshnye* in papers started being denominated by the Preobrazhensky and Semenovsky regiments. At the same time, around 1693–1695, both units together were referred to as the first and the second thousands of the Third *Vyborny* regiment. Starting in 1700 they became known as two regiments of Life Guards.

Bombardiers within Preobrazhensky were a small team of men (in 1697 separated out as a company, the most senior of all) with artillery and engineering training who were able to fulfil technically difficult tasks, but above all they were the most trusted men to the Tsar, who sent them on numerous military and administrative missions. Some rank and file and NCO bombardiers enjoyed an informal status that even allowed them to oversee generals. Peter ascended through the ranks in the bombardier company until in 1706 he became colonel of the regiment. Preobrazhensky was thus often referred to by the Tsar as 'our regiment'; Semenovsky was considered second after it.

Socially, future guardsmen were of differing origins. By the end of the 17th century some of them were court servants and nobles, others were non-

gentry volunteers including runaway serfs. The biggest increase in numbers occurred in 1694–1696; during the war years some inflow of chosen men from line infantry also occurred. As the status of the regiments increased by the late 1690s, service in them became more and more attractive to the nobility. They joined the Guards as soldiers and over time were promoted into officers' ranks in line regiments. Over time this practice was formalised and after 1710 it became obligatory for a noble to serve as a soldier in the Guards before obtaining an officer's commission. This in turn later in the 18th century led to a custom of enlisting noble children into the Guards so that they grew in rank while actually growing up far from the unit. Nevertheless, the share of non-nobles among guardsmen was considerable. Out of 4,335 men of the two Guard regiments in 1723 only 44 percent were noble, 16 percent were children of old military categories (soldiers and *Reiters*), 34 percent were ex-townsfolk, peasants and servants. Unlike the rest of the army, where there were many foreigners among the officers, the Guards had very few foreigners – only 1.3 percent.[27]

The guards were not merely household troops that escorted the monarch. Throughout the war years they remained the most experienced and battle ready units. They participated in nearly all campaigns of the Russian army during the war and were often used as the shock troops. Peter relied on them most of all, and in the early stages of the war sent them on critical missions; they stood fast at first Narva, stormed Noteburg and suffered heavy casualties, stormed Narva, besieged Mitau, fought at Dobroe, Lesnaya, and Poltava, besieged Vyborg, etc. The Tsar valued his Guards; he did not hesitate to send them on critical tasks but he also did not want them to be spent in secondary missions. In May 1708 he ordered that the Guards were not to be used against an enemy without his direct consent. That is why, for example, he was angry at Sheremetev, who sent the 2nd and 4th battalions of Preobrazhensky to assault the village of Rashevka in Ukraine on 26 February 1709. The combat was a success – the place taken, and the Swedish dragoon regiment defeated and captured together with its Colonel Albedyhl. On the other hand, Guards Major Fedor Bartenev was mortally wounded and Preobrazhensky lost 57 wounded and 14 killed. This was not a price Peter was willing to pay for such a minor success.

Elite Infantry

The Butyrsky and Lefortovsky regiments were elite infantry (*vybornye*) long before 1700. Later in the course of the war they were still considered second senior units after the Guards, and throughout the 1700s and 1710s they even

27 Iu.N. Smirnov, 'Osobennosti sotsialnogo sostava i komplektovaniia russkoi gvardii v pervoi polovine XVIII veka' [Peculiar properties of social structure and staffing of Russian Guards in first half of 18th century] in *Klassy i sosloviia Rossii v period absoliutizma. Mezhvuzovskii sbornik statei* [Classes and estates of Russia in period of absolutism. Inter-university compendium of articles]. (Kuibyshev, 1989), pp. 87–107; 'Sotsialnoe proiskhozhdenie chinov russkoi gvardii i ee komplektovaniia v gody Severnoi voiny' [Social background of ranks of the Russian Guards and its staffing during the Northern War] in *Poltava. K 300-letiiu Poltavskogo srazheniia. Sbornik statei* [Poltava. For the 300th anniversary of the Battle of Poltava. Compendium of articles] (Moscow, 2009), pp. 229–241.

retained the distinctive red uniform they received in the 1690s. But now they were not given any special tasks that would emphasise their status. In their stead, new elite infantry appeared that often operated together with the Tsar's guards.

The Ingermanlandsky regiment, or soldier regiment of the Governor of Ingermanland Alexander Menshikov, was created in 1703 out of the best soldiers of other regiments. It received pay on a par with the Guards and was considered the personal guard to Menshikov. The unit comprised three battalions which also made it more considerable compared to two-battalion regiments of the line.

The Astrakhansky regiment was one of those raised in 1700 and between 1704, and in 1711 was commanded by Colonel Mikhail Borisovich Sheremetev, son to the Field Marshal. It was probably because of this connection or due to the unit's combat distinctions that it enjoyed special status within the army; its battalion often operated together with the Guards.

Both the Astrakhansky and Ingermanlandsky regiments retained their grenadier companies – like Guard regiments did, and unlike the rest of the line infantry that permanently detached their grenadier companies to compose grenadier regiments in 1708–1710. These two units were part of the Guards Division in 1708–1713 and were often sent to critical missions together with the Guards, for example at the Battle of Lesnaya.

Infantry

Whether Peter could have waged war with his old forces remains subject to speculation. The fact is that he decided to create new field infantry from scratch. In November–December 1699 three decrees announced the raising of divisions of 'newly recruited' (*novopribornye*) soldiers.[28] The division of Avtomon Golovin in Moscow recruited free individuals – volunteers (*vol'nitsa*) who were offered a wage of 11 rubles a year, and uniforms and provisions on a par with the Preobrazhensky and Semenovsky regiments. This was a new and unusual method of raising troops for Russia and probably copied European practices. Because of the lack of volunteers, Golovin was given levy recruits who constituted 20–25 percent of the division, which became 8,000–9,000 men strong. Another division in Moscow, General Adam Weide's, was raised via conventional levy where landlords and clerics were obliged to provide one man (*datochny*) from a certain number of serf families (25–50 depending on the standing of the landlord). The 10,356 men thus recruited were to receive uniform and provisions from their lords and were not entitled to money wage; after the war started they received rights equal to the volunteer soldiers. The third Division, created in the lower Volga region in the central cities of Nizhny Novgorod and Kazan under General Anikita Repnin combined both methods of recruitment, however free volunteers dominated to about 95 percent and overall 10,720 men were recruited. Recruitment also started in Novgorod,

28 M.D. Rabinovich, 'Formirovanie reguliarnoi russkoi armii nakanune Severnoi voiny' [Establishment of the regular Russian army on the eve of the Northern War] in *Voprosy voennoi istorii Rossii XVIII – pervoi poloviny XIX vv.* [Questions of military history of Russia in the18th–first half of the 19th centuries] (Moscow, 1969), pp. 221–233.

Pskov and Smolensk, although to a far lesser extent; these regions gave only 2,500–3,000 men – supposedly the government did not want to carry out mass recruitment in border regions where preparations for war could become known to the Swedes.

Volunteers allowed into regiments were to be personally free individuals; often they were children of military, not surprisingly many were runaway serfs. Age limitations were only set for Repnin's Division, at 15–30 years old; Moscow *streltsy* were not allowed. Levy recruits were serf household servants (*dvorovye*) or craftsmen who were not involved in farming labour.

Recruits first formed temporary training regiments where they received weapons and learned drill manuals. Firing practice was not insignificant to the standards of the time – men were issued from one to two pounds of gunpowder. Musicians underwent training in the old Moscow regiments. Training units were then disbanded and men transferred to the newly created infantry regiments.

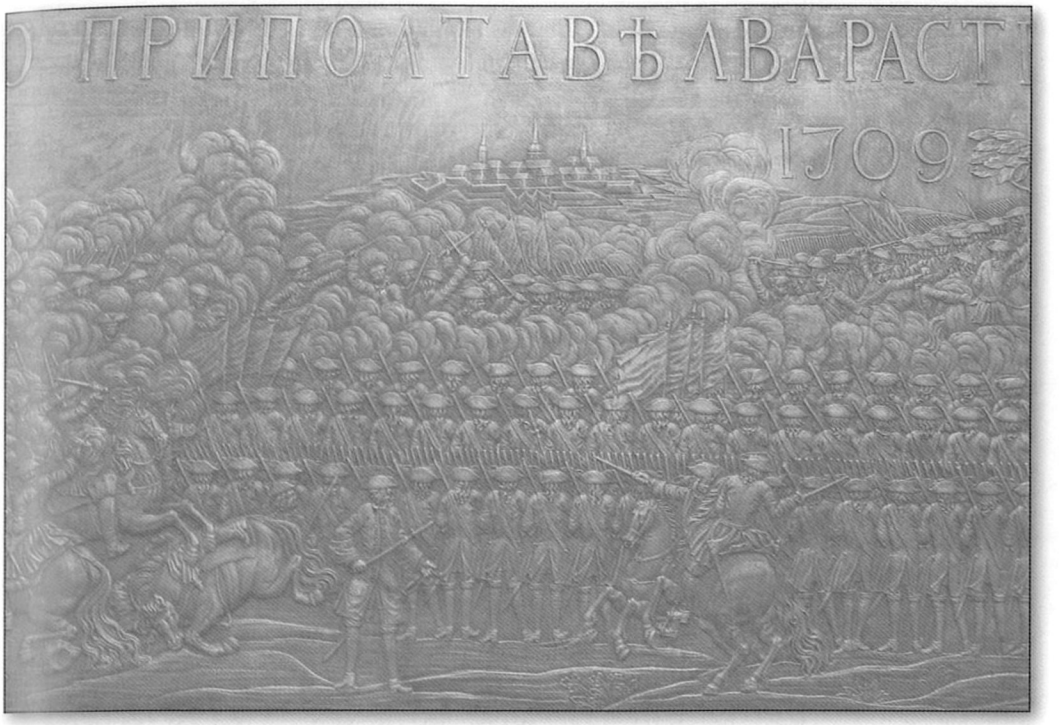
Commanders were a problem. Colonels – old foreigners – were experienced enough, but junior officers and NCOs were lacking both in quantity and in quality. By July 1700 – just two months before Russia entered war – about 71 percent of the officer positions remained vacant. Ethnic Russians comprised 60 percent of the then available officers. Among foreign officers 150 were rejected after inspection for it turned out they did not know the soldier's trade. Officers from provincial regiments came to train recruits but were found unfit for field service. The solution was to fill officer positions with Moscow noblemen who had over 40 serf families in their household and thus served without pay. These were many and wealthy enough, but in terms of qualification they were not any different from their recruit soldiers. Non-commissioned officers were appointed from among recruits and did not have any military experience or commanding expertise; thus the lack of officers could not be compensated for by the professionalism of NCOs.

Such was the new standing army; by the time it entered the war, there were 25 new regiments in brand new uniforms, with new weapons, trained per new regulation and they had spent only few months in the ranks. With this experience they arrived to Narva in 1700.

As the war progressed, the army needed more men to replace losses and fill new regiments, so more levies followed.[29] In the early years of the war the government did not want to stress farming communities, nor was the need of new men extreme. In 1700–1702 they kept recruiting volunteers but their inflow decreased. In 1702–1703 they imposed forced levies on poor townsfolk – this did not affect the economy but the recruits appeared to be often of poor morale and health. Another levy of household servants in 1703 showed that this category of serfs was now nearly extinct. In late 1704 they drafted every second coachman (*yamschik*) which hit the country's transportation system. In 1704–1705 they carried out a total levy of peasants in all the households of Moscow and surrounding towns. The only remaining available resource was peasants of the entire country.

29 V.A. Tikhonov, *Rekrutskaia sistema komplektovaniia russkoi armii pri Petre I* [The recruitment system of the staffing of the Russian army in the reign of Peter I] (Saarbrucken: Lambert, 2012).

17 (above, below, right). Battles of Poltava and Lesnaya (Bartolomeo Carlo Rastrelli (1675–1744) and Andrey Nartov (1693–1756)). Fragments. The series of bas-relief plates – rectangular and circular in shape – was created in early 1720s to be part of the Triumphal Column. Although the project remained unfulfilled, model bas-reliefs survived and represent nearly all feats of the Russian troops from 1702 until 1722. The uniforms shown reflect period of production rather than period depicted. (Author's photos)



Finally in 1705 a system of regular recruit levy was introduced on the advice of Field Marshall Ogilvy. Every year one man from every 20 families was taken, and unlike previous levies, recruits were now farm peasants. This gave the army a steady inflow of numerous manpower that was necessary in the most dramatic period of the war prior to Poltava. But it also meant considerable strain for country's agricultural economy. Not to mention that the forced levy was hard on the population and led to mass desertion. Peasants bore numerous money and labour taxes in the country, where war efforts went along with enormous construction works and continuous economical and administrative reforms. Besides annual levies there were extraordinary ones.

After 1711 recruiting became less intense: levies did not now happen every year, and amnesty to deserters was declared several times. The concept of 'the eternal recruit' was abandoned – it meant that if a recruit deserted, his community was obliged to give a substitute. In order to ease the search for runaways, starting in 1712 recruits were given a tattoo near the left thumb. Initially it was a cross, then a round mark.

The service was lifelong, that is, an individual entered a new social strata of personally free men and never returned to serfdom; his family members became free as well. The new status did not imply lifelong service in ranks, however. Soldiers with health issues or age were transferred to garrison troops or received permanent leave.

Petrine regulars were homogenous ethnicity-wise, recruits came from the Russian population of the central and eastern regions, and confession-wise they were Greek Orthodox. Non-Russian Muslim and pagan people were exempt from regular service. The only experiment was in 1720 when they recruited in the occupied Finland with the aim of staffing garrisons in

Kazan and Astrakhan. This was a failure, as the majority of recruited Finns fell sick or died in the hot climate, some deserted, and some finally served in the Moscow garrison.

Demographic data on the officer corps is available for the end of the war years, thanks to Rabinovich's study of 2,245 individual autobiographies of infantry, dragoon and grenadier officers.[30] Russian nobility comprised 62 percent of all officers (among infantry 52 percent, and among cavalry 71 percent); 14 percent were non-noble former other ranks; 10 percent were servicemen from old military categories (e.g. *Reiters* etc.). Literacy was 92 percent. Although the establishment of 1711 allowed one third of all officer commissions to be filled with foreigners, by 1720 only 13 percent were foreigners. The majority of these were high-ranking officers from Major and above. Out of those foreigners up to 40 percent were so called 'old foreigners' who came to Russia in the 17th century or were even born in Russia after their fathers arrived to serve Peter's father Tsar Alexey. They were probably more educated compared to native officers, however they lacked contemporary military experience. That is why after the Great Northern War began, Peter hired 'new foreigners' – those who had participated in recent European conflicts of the 1690s. During the 1700s the Russian government attracted such military specialists by offering them a rank one level higher than they held in their previous service and by higher pay compared to 'old foreigners'. In 1710 the need for foreign officers decreased and new hire became rare. Rabinovich's study shows that only 10 men were ex-Swedish prisoners, junior officers and doctors. This must be because the documents were filled out at the end of the war when most Swedes were given leave, whereas during the war, especially after major Russian victories, Swedes enlisted into Russian service in relatively big numbers. They were often employed in the artillery or in garrisons far from the Swedish front, for example in Azov or in the Urals; but some did participate in actions against their former compatriots, General Schlippenbach being the highest-ranking person of this kind.

Grenadiers

Grenadier companies existed only in infantry regiments of Repnin's Division in 1700, in other regiments grenadiers were introduced later between 1701 and 1705. It was common practice to detach grenadiers from their parent regiments and (during campaign season) create temporarily converged grenadier battalions or regiments. In the campaigns of 1706 and 1707 there were six such grenadier units, according to Tatarnikov. One of them, under the command of Colonel Efim Boeck (Bouk) had 10 grenadier companies from the regiments of Ingermanlandsky, Sibirsky, Lefortovsky, Nizhegorodsky, Velikoluksky, Vologodsky, Belgorodsky, Novgorodsky, Narvsky, Koporsky.[31] Boeck was hired

30 M.D. Rabinovich, 'Sotsialnoe proiskhozhdenie i imushchestvennoe polozhenie ofitserov reguliarnoi russkoi armii v kontse Severnoi voiny' [Social origins and property status of officers of Russian army in the end of Northern war] in *Rossiia v period reform Petra I.* Sbornik statei. [Russia during reforms of Peter I. Compendium of articles] (Moscow, 1973), pp. 133–171.

31 *Severnaia voina. Dokumenty 1705–1708. Sbornik voenno-istoricheskikh materialov. Sost. D.F. Maslovskii* [Northern War. Documents 1705–1708. Collection of military-historical materials. Compiled by D.F. Maslovskii] Vol. 1, (SPb, 1892), Appendix, pp. 6–7.

recently, arriving from Europe and bringing with him grenadier exercises from where he served before: Poland, Prussia and the Netherlands. In 1707 he sent a proposal to the Tsar where he described the ideal organisation of grenadier units: regiments to be established where companies would stay permanently and get the same uniforms and fusils of same calibre; artillery officers were to instruct grenadier officers (Boeck saw grenades exploding in men's hands in a previous campaign); since Grenadiers rarely grew old (i.e. live long), other princes made their lives more comfortable and gave them one rank higher in comparison to other soldiers.[32]

Bringing together companies from different regiments had its drawbacks. In October 1707 James Bruce complained to Sheremetev about disorder in the grenadier regiment of that very Boeck: captains preferred to take commands from their parent regiment and did not pay much respect to the grenadier colonel. This latter, in turn, was an experienced grenadier officer, but he did not speak Russian and wanted instructions about which drill manual to teach – Brandenburg, Dutch or Saxon (nor did he know there was Russian grenadier exercise in place). Bruce believed that grenadiers had to be given permanent standing, and meanwhile Sheremetev ordered that the companies were sent back to their parent regiments.[33] When new grenadier regiments were created between 1708 and 1710 they used three different ways to name the units. A grenadier regiment at times was called after its colonel or the division it belonged to, either by number of division or by name of commanding general. Bringing together the puzzle of these three types of naming resulted in the following.

Boeck's new permanent unit was created in March 1708 out of seven companies (Kazansky, Kargopolsky, Moskovsky, Novgorodsky, Pskovsky, Sibirsky, Ustyuzhsky). After Boeck became Major-General and resigned in 1710, the commanders in succession were Leinrot, Frazer, Mengden, Bils (1717–1721). Between 1708 and 1716 it was also called the Grenadiers of Hallart's Division. By 1721 Bils' Grenadiers were also called the 1st Grenadiers as it was the senior of the two grenadier units in the Corps of Finland.

Major-General Bush's Grenadiers were raised also in 1708 out of Belozersky, Vyatsky, Kievsky, Koporsky, Lefortovsky, Olonetsky, Rostovsky, Saksonsky, Tobolsky. It was a grenadier regiment of the 1st Infantry Division, hence sometimes also was referred to as 1st Grenadiers, but most often it was called Weide's Grenadiers, for General Adam Weide remained the division's commander from 1711 to 1720 when he died and the regiment went to General Hallart.

Colonel de Bois' regiment of six grenadier companies (Apraksin, Peterburgsky, Vyborgsky, Permsky, Troitsky, Fichtenheim) was created in May 1709 by Admiral Fedor Apraksin out of units that were stationed in and around St. Petersburg and from thence arrived to the main army near Poltava. Right after the battle in July it was disbanded. In January 1710 the same companies with an additional five (Arkhangelogorodsky, Belozersky,

32 *Severnaia voina. Dokumenty 1705–1708.* pp. 187–189, Appendix, p. 6.

33 *Sbornik Imperatorskogo russkogo istoricheskogo obshchestva (IRIO)* [Collection of Imperial Russian Historical Society]. T. 25 (SPb, 1878), pp. 51–53.

18. Recreated kits of a musketeer circa 1700–1702, and a musketeer circa 1703–1709. Reenactment group "Preobrazhensky Life Guard Regiment, 1709". (Photos by Yulia Obraztsova)

Vladimirsky, Smolensky, Chemers) formed a new permanent grenadier regiment. It was named after Colonels Lutkovsky, Bils, and Baryatinsky (1717–1719). Most often, though, it was called 2nd Grenadiers as it was another grenadier unit in the Corps of Finland.

Grenadiers of General Repnin's Division were raised in 1708 out of nine grenadier companies (Butyrsky, Belgorodsky, Nevsky, Nizhegorodsky, Pereyaslavsky, Tverskoy, Shlisselburgsky, Yamburgsky, Yaroslavsky) and stayed in that division throughout the war years. At the same time in 1708 the unit bore name of Colonel Taylor and from 1709 and until the end of the war Colonel (later Major-General) Peter Lacy.

Grenadiers of General Enzberg's Division in 1708 were raised out of the regiments of his division (Velikoluksky, Vyatsky, Voronezhsky, Chernigovsky, Ryazansky). Colonels were von Adonow and from 1712 and – until the end of the war – Colonel Campenhausen, an ex-Swedish *drabant*.

Despite grenadier regiments having permanent commanders and permanent place in their divisions, their composition was not fixed forever. Some companies could be detached elsewhere. For example in 1711 the companies of Permsky and Chemesov Regiments left 2nd Grenadiers; in 1717 two companies of 1st Grenadiers were sent to Mecklenburg service as guards to Princess Elizaveta Ioannovna, niece to Tsar Peter, and remained there until 1719.

While most infantry regiments gave away their grenadier companies in 1708–1710, some retained them a little longer (for example, Azovsky and Yaroslavsky until 1711, Butyrsky until 1713) and Astrakhansky and Ingermanlandsky kept their elite sub-units all the time.

Garrison Troops

Units performing garrison duty existed long before the garrison regiments were formally introduced in Peter's army in 1711. Those old units were called *zhiloy* (settled) soldier or *streltsy* regiments. Others were just soldier regiments that did not participate in operations of the field army and *de facto* became a garrison.

In 1711 new garrison regiments – soldiers and dragoons – were raised. 'Ost See' units, i.e. those stationed in the Baltic region, were more battle ready compared to the garrison in faraway provinces. Garrisons were a ready source for trained soldiers, so in 1712 the Tsar gave an order to strengthen the corps of Sheremetev with men from garrisons and to send recruits to garrisons instead of field units. The same logic applied in 1715 when the Tsar ordered garrison soldiers sent to Repnin's division 'so that regiments were not weakened wth new men'. Later in 1716 it was confirmed that garrisons were to train recruits before sending them out as field troops.

Land Militia

The first land militia, named so after European examples, was created in 1711–1712 by the decision of St. Petersburg Governor Menshikov when the Tsar with the army was away on the Turkish campaign.[34] This force was to

34 V.A. Tikhonov, 'Sankt-Peterburgskaia landmilitsia 1711–1719' in *Vestnik Moskovskogo gosudarstvennogo oblastnogo universiteta. Seriia Istoriia i politicheskie nauki*, Vol. 1, 2008, pp. 14–21.

help defend north-western borders and was raised from peasant serfs of the north-western areas. Unlike regular soldiers, men of the land militia remained dependent of their landlords and performed their new service along with their farming. The St. Petersburg land militia was mainly used to man construction sites, transportation routes etc.; its strength reached four regiments but eventually it was disbanded in 1719.

In the course of Petrine tax reform the old military categories of population of borderline areas (town Cossacks etc.) were transformed after 1710 into taxpaying peasants. Thus the vast southern frontier was left without its traditional semi-military population (or the population was deprived its semi-military status) and the frontier now had to be guarded by regular troops of the Corps in Ukraine.

The first Ukrainian land militia was created in haste in early 1713 after the 1712 Ottoman crisis.[35] By October 1713 eight regiments were raised in the Kiev and Azov regions; by that time the war with Turkey had ended with peace, so land militiamen never saw action. They were employed in the building of Kiev fortifications and dismissed in 1714. A second attempt was made in 1723–1725 due to yet another crisis with the Ottoman Empire. Subsequently the Ukrainian land militia grew to 24 regiments, provided manpower to the new fortified lines on the southern frontier, and survived until the second half of the century.

Artillery

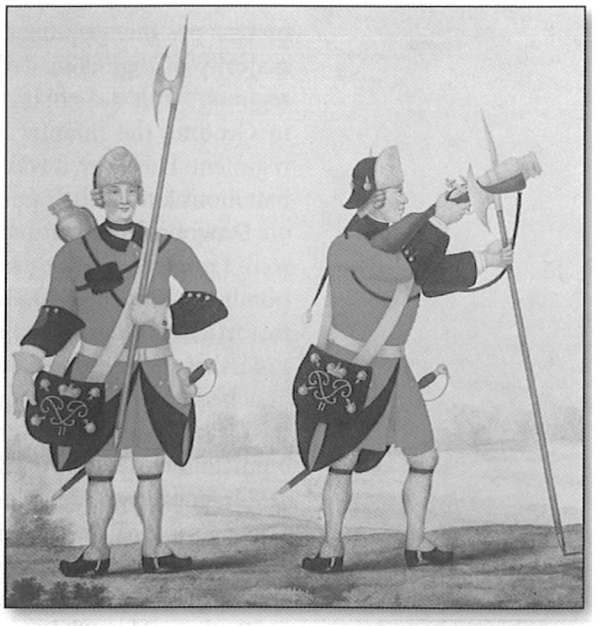
The Master of Ordnance (General-Feldzeugmeister) in 1700–1711 was Georgian Prince Alexander Archilovich of Imeretia. He studied gunnery abroad but had no combat experience; after the Narva defeat he spent 10 years in captivity and died there. In 1701 the artillery was taken care of by Andrew Vinnius, who mainly surveyed manufacturing and in the end did not satisfy the Tsar. In 1704 Major-General James William (*Yakov Vilimivich*) Bruce, Governor of Novgorod, was put in charge of the artillery; after the death of Prince Alexander he was formally appointed General-Feldzeugmeister and held this position until 1725.

The old artillery was reorganised along with the rest of the army, and the Artillery Regiment came to being in 1701. Other ranks were eventually filled with recruits. Schools were established in Moscow, and later in St. Petersburg, to teach mathematics, engineering, drafting, etc. to pupils who would graduate as artillery NCOs. The roster of the regiment from 1706 shows that the unit comprised one bombardier company and four cannonier companies. Bombardiers had higher qualifications, they manned mortars and howitzers, and prepared and fired explosive and incendiary shells. Cannonier companies consisted of cannoniers (*pushkari*), fusiliers, and *handlangers* – the least-qualified men. Fusiliers were armed with musket and sword; others had only sword, powder horn, and linstock. The first official

35 N.N. Petrukhintsev, 'Osnovnye etapy landmilitskoi reformy 1710–1730-kh godov' in *Voennoe proshloe gosudarstva Rossiiskogo utrachennoe i sokhranennoe. Materialy Vserossiiskoi nauchno-prakticheskoi konferentsii posviashchennoi 250-letiiu Dostopamiatnogo zala 13–17 sentiabria 2006 goda*, (SPb, 2006), Part 3, pp. 32–37.

establishment of 1712 set the following structure: bombardier company (besides officers, NCOs and drummers there were 30 bombardiers and 56 handlangers, now assistants to the former), six cannonier companies (25 cannoniers and 100 fusiliers per company), a miners' company and teams of petardiers, pontoniers and engineers.[36] All served in the field artillery, or in garrisons, or with the regimental guns of infantry or dragoons. Of course the establishment also included members of staff, regimental clerks, train drivers and artisans. Ranks in the artillery were one step higher than those in the line troops, and thus were equal to the Guards.

'Bombardier' is a frequent popular description of a Petrine warrior, so clarification is necessary. Guard bombardiers were a company within the Preobrazhensky regiment clad in green and red; they were soldiers armed with muskets and able to perform tasks dealing with artillery, fireworks and engineering; Tsar Peter was captain to this company. Artillery bombardiers were a company within the Artillery regiment with appropriate red-blue uniforms and armed with swords. The widely known image of an artillery bombardier in a helmet with hand mortar on a halberd dates to the late 1720s. This plate, as well as Viskovatov's drawing based on it, should not be equalised to the Petrine bombardiers of any of the two entities: during the Great Northern War period, leather helmets were only used in two Guard grenadier companies, and hand mortars of this type were not issued weapons in any of the two bombardier companies.



19 (above). Bombardiers of the artillery. Published in ***Glinka, Russian Military Costume XVIII–XX*** (1989).
20 (below). Artillery officer, bombardier and fusilier. (From V.A. Viskovatov, ***Istoricheskoe opisanie odezhdy i vooruzheniia rossiiskikh voisk*** [Historical description of the clothes and armament of Russian troops], T. 2 (1700–1725) (SPb, 1899))

The 1712 the establishment only set a standard for personnel. Numbers or types of artillery pieces were not specified until 1723, and during the war years varied according to circumstances. The field artillery, together with the train, was not only the army's artillery reserve. It also stored and transported tools, pontoons and munitions necessary to the army – gunpowder, lead, slowmatch; it was also responsible for purchase and distribution of weapons to the regiments. Siege artillery was basically an ad hoc formation raised when needed. Fortress or garrison artillery was administered outside the artillery regiment.

Regimental artillery of infantry regiments in 1700–1704 as a rule comprised one 3 pdr gun per battalion

36 *Polnoe sobranie zakonov Rossiiskoi imperii* [Full collection of the laws of the Russian Empire], Vol. 4, (SPb, 1830), pp. 792–796.

or two per line regiment.[37] By late 1705 this number had doubled in the majority of regiments – they now had two guns per battalion or four per regiment. This did not last long, and after half of these guns were abandoned in Grodno, the infantry returned to the previous norm of two guns per regiment. However, it was not universally observed: in 1709 we see that some battalions lacked their guns.

Dragoon regiments received their regimental pieces as late as 1701 – these were 1 pood and ½ pood howitzers, one piece per regiment. These pieces fired bombs and appeared too heavy to catch up with the cavalry; after seven were lost in 1705 at Gemauerthof they were not replaced. It was only in October 1706 that dragoons received artillery again – this time the guns were not attached to particular regiments but to brigades or divisions (the exclusion to this rule was the Ingermanlandsky Dragoons that in 1709 retained three 3 pdr guns with four 6 pdr mortars on them). Overall Menshikov's cavalry (16 dragoon regiments) before it won the 1706 Battle of Kalisz received nine 2 pdr guns and 36 gunners. At Golowzcyn in 1708 the dragoon brigade of Heinske (five regiments) had three guns, two of which were lost. At Poltava the dragoons in 27 regiments had 13 guns.

Regimental artillery was manned with several gunners from the artillery regiment who were attached to regiments. For example, in 1704 nine Sheremetev's foot regiments had 18 guns, three artillery officers and 36 gunners. In 1707 there were as a rule six men per foot regiment; some had more, such as Ingermanlandsky which had 19 cannoniers; Preobrazhensky had 45.[38] Usually there were three professional gunners to a regimental gun (one cannonier and two fusiliers) – this was so in 1707, 1708[39] and 1715.[40] Two more men were attached to the gun crew from infantry – this was confirmed later in 1723.

Starting in 1705 the Russian artillery had its own train; its personnel were recruited drivers (*furman or furleit*) who were servicemen and no longer temporarily drafted civilians. The train horses were now purchased by the Ordnance and did not come from requisition, as was done before. The quantity of drivers, officers and horses of the Train (*Furmanskaya sluzhba*) was laid down in a series of establishments of 1705, 1710–1712, 1720, and 1725. In the Poltava period the train led by Colonel Efim Zybin consisted of 12 teams which were distributed among the divisions of Sheremetev, Hallart, Rentzel, the dragoons, and the field artillery, and had 12 officers, 21 NCOs, 852 drivers, 1,290 artillery horses and 121 spare horses.[41] This was enough for the field

37 K.V. Tatarnikov, 'Polkovaia artilleriia russkoi armii v pervuiu tret XVIII v.' [Regimental artillery of the Russian army in first third of the 18th century] in *Poltava. K 300-letiiu Poltavskogo srazheniia. Sbornik statei* (Moscow, 2009), pp. 39–48; V.S. Velikanov, 'Polkovaia artilleriia russkoi armii 1700–1709 gg.' [Regimental artillery of the Russian army 1700–1709] in *Staryi Tseikhgauz*, 44, 2012, pp. 82–87.

38 *Severnaia voina. Dokumenty 1705–1708* (1892), pp. 115, 118, 123, 125, 134, 137.

39 *Arkhiv general-feldtseikhmeistera Iakova Vilimovicha Briusa* [Archive of General Feldzeugmeister Jakob Bruce] T. 4, Letters of J. Bruce 1708. (SPb, 2008), p. 179.

40 Archive of the Artillery Museum (VIMAIViVS), F. 2, Op. 1, D. 180 (1715), p. 245.

41 E.E. Kolosov, 'K voprosu preobrazovaniia russkoi artillerii v pervoi chetverti XVIII veka' [Concerning reforms in the Russian artillery in the first quarter of the 18th century] in *Sbornik dokladov voenno-istoricheskoi sektsii Leningradskogo doma uchenykh im. A.M. Gorkogo* [Compendium of papers of military-historical section of the Leningrad House of Scholars], 1, (Leningrad, 1957), pp. 57–62.

artillery, but transporting siege trains still required extraordinary requisitions from peasants. In 1708 the Kargopolsky Infantry Regiment of Colonel Strekalov was attached to the field artillery to serve as infantry support.

Dragoons

These were the only type of regular horsemen in Petrine forces; no heavy cavalry or horse, that existed in other European armies. There were no dragoons in the Russian forces at the start of Peter's reign, although they existed earlier in the 17th century. The first dragoon unit (known as Kievsky since 1706) was raised in 1698, the second (Moskovsky) in 1700; both were created in the Guards base in Preobrazhenskoye hence they were sometimes called Preobrazhensky dragoons.[42] Dragoon regiments created from 1698 to 1705 were staffed with noble volunteers or conscripted nobles. Their major difference compared to the old-style horse was that dragoons served permanently and were only paid a money wage, and no land grants. More dragoon units were raised from noblemen of central Russia and the lower Volga soon after the war started: nine regiments in 1701, four in 1702 etc. In 1705 with the launch of regular recruit levies, dragoon regiments started receiving peasant recruits like the infantry. This created the curious situation where nobles who were rank and file dragoons now served in the same rank with former serfs. For example in 1711 in the Lutsky and Narvsky Dragoons the share of noble men in all ranks was 87 and 85 percent; by the end of the war this share dropped, naturally.

Finding servicemen was the least problem compared to supplying them with horses and weapons; sometimes the new dragoon regiments marched to Novgorod on foot. Contemporary comments agree that the mounts of Russian dragoons were not satisfactory in comparison with European cavalry. 'They are mounted upon light tartar horses,' wrote Whitworth on 26 March 1705, 'and have had several successful rencounters with the Swedish parties in Liefland; but it is not thought they will be able to make head in a set battle against the Swedish cuirassiers, who have a great advantage by their horses and armour.'[43]

These were small and low Asiatic horses; a decree prescribed that the army purchase Kalmyk horses accustomed to shots. On the other hand they were robust enough to endure long marches.

Uniformity in colour of horses was hardly achievable for most of the army. Though, eyewitness at Narva in 1704 recorded that an elite cavalry (probably Sheremetev's escort dragoon battalion) all rode light grey horses; in 1720 Bergholtz saw Kievsky Dragoons where four out of 10 companies rode white horses.

Unlike the infantry, many dragoon regiments had native Russian colonels and officers; they were high-born gentry who used to be officers in feudal

42 N.P. Volynskii, *Postepennoe razvitie russkoi reguliarnoi konnitsy v epokhu Velikogo Petra s samym podrobnym opisaniem ee uchastiia v Velikoi Severnoi voine. Istoricheskoe issledovanie po pervoistochnikam* [The gradual development of Russian regular cavalry in epoch of Peter the Great with the most detailed description of its participation in the Great Northern War]. TT. 3, 4. (SPb, 1912).

43 *Sbornik IRIO*, T. 39, (SPb, 1884), p. 56.

horse or *Reiters*, but their combat experience and expertise in contemporary dragoon service was lacking. Foreigners were attracted, too; some of them distinguished themselves, such as Bauer, Ronne, Inflant, and Pflug; others were dismissed such the Frenchmen Devgerin and Malino, who were accused of inappropriate behaviour with local civilians.

In terms of tactics, the first two dragoon regiments were rather mounted infantry. Both units commanded by infantry colonels took part in the first Narva campaign and participated in the battle on foot, defending fortified lines along with the infantry. On the contrary, other units raised out of noble horse were straight cavalry who had to be taught dragoon exercise.

Horse Grenadiers

The grenadier companies were first established in dragoon regiments in 1705 (in Vologodsky and Narvsky) and then in 1707 in the rest of units. Prior to that there were no horse grenadiers, however lancer companies (one out of 11 in a regiment) were introduced in 1702 by Sheremetev as an analogue to the grenadiers of infantry regiments. In early 1709 all grenadier companies were combined to create three permanent horse grenadier regiments (grenadier dragoons was their official name). These were named after colonels, as a rule.

Gavrila Semenovich Kropotov, Colonel then Brigadier, commanded a unit that combined 10 grenadier companies of the following dragoon regiments: Azovsky, Belozersky, Ingermanlandsky, Kazansky, Nizhegorodsky, Ryazansky, Sankt-Peterburgsky, Tverskoy, Troitsky, Yamburgsky.

Colonel Christopher von der Ropp: Astrakhansky, Kargopolsky, Kievsky, Lutsky, Narvsky, Novgorodsky, Permsky, Pskovsky, Ustyuzhsky, Vologodsky.

Colonel Semen Khlopov: Arkhangelogorodsky, Kievsky, Moskovsky, Novotroitsky, Rostovsky, Sibirsky, Smolensky, Vladimirsky, Vyatsky, Yaroslavsky.

Elite Dragoons and Squadrons

There was no Guard cavalry the during the war years, however several dragoon units enjoyed special status. In 1703 Field Marshal Sheremetev raised his own escort unit staffed with chosen men from other dragoon regiments. It was first called the *Vyborny* Dragoon Battalion, in 1705 it was a 'Squadron' (five companies), and in 1708 was renamed the Arkhangelogorodsky Regiment and probably lost its status. Another of his troops was the *Domovy* (Household) Squadron or Company. These Sheremetev units seem to have sported exotic uniform colours: yellow with green facings.

The most influential person in the Tsar's circle – Alexander Menshikov – was governor to the vast Ingermanland (St. Petersburg) province and commander of all cavalry. He had a number of 'his' units.[44]

The *Generalny Shkvadron* (General Squadron) raised in 1706 had one grenadier and four dragoon companies, totalling 500 men. By 1711 it was

44 V.G. Danchenko, V.F. Mezenev 'Voiska A.D. Menshikova' in *Novyi chasovoi*, 15–16 (2004), pp. 23–27; V.I. Egorov, 'Generalnyi shkvadron generala kniazia A.D. Menshikova. Obmundirovanie i snariazhenie 1706, 1709, 1712' <http://books.reenactor.ru/?bookid=1561> (accessed 4 April 2017); V.I. Egorov, 'Generalnyi shkvadron. Svodnoe opisanie uniformy 1706-1712' <https://yadi.sk/i/N1tCL7-Lg3ZLn> (accessed 4 April 2017).

renamed *Leib-Shkvadron* and gradually lost its status. After the war ended the squadron, together with Sheremetev's Household, formed the Kronshlotsky Dragoon Regiment that in 1725 was renamed new Leib-Regiment and in 1730 became horse guards.

The *Domovy* (Household) or Hoff Squadron was created no later than 1703, according to Egorov; in early 1709 it had 160 men.

The Ranenburg Squadron, according to Rabinovich, first mentioned in 1704, disbanded in 1714. Together with the Voronezh and Kozlovsky squadrons it amounted to 500 men in 1709. It was named after Menshikov's estate in the Lipetsk region.

The Leib-Regiment was raised in 1707 from men of other dragoon and foot regiments and of recruits. Unlike *shkvadrons* this was a true dragoon regiment that had seniority over all other dragoon units, for its chief was head of all the cavalry. In 1719 it was renamed Sankt-Peterburgsky Dragoon Regiment.

Two dragoon regiments of the Ingermanland governor were created in 1704–1705 from young nobles in Moscow. The first was immediately named Ingermanlandsky thus making up the first provincial name among dragoon units. Another was sometimes called 2nd Ingermanlandsky or after Colonel Portessis, and in 1708 became Nevsky. Both enjoyed the privilege of being Menshikov's personal units, although it did not confer any special standing

Several more separate squadrons should be mentioned even if they were not any sort of elite nor displayed any outstanding performance: the squadron of General-Admiral Apraksin in Voronezh, the Kozlovsky squadron, and the Roslavl squadron raised in 1704 in Smolensk out of local noble *Reiters*, dragoons and youth.[45]

There were also temporary troops dressed in rich uniforms to perform ceremonial duties. A company of *drabants* was created in 1710, to be precise it was a mere 66 uniform kits to be issued to dragoons for parades in front of foreign ambassadors; their green–red coats were laid with gold lace and their belts covered in red with the same lace. These uniforms, with the addition of a red vest bearing a double eagle were later issued to Chevalier-Guards (*kavalergardy*). This was a ceremonial company raised in Moscow in 1724 among chosen officers of the army, on the occasion of coronation of Catherine, the Tsar's wife. It was a short-lived formation meant to add shiny splendour on the day of the Imperial festivities. It was not really a unit nor were they proper Guards.

Light Cavalry

In the course of the war, Russian troops faced volochs in Swedish service. Those were light horse from Moldavia, Wallachia, Ukraine, Poland, Serbia, and Hungary who previously served in Poland-Lithuania. It was a relatively new type of cavalry; about the same time, similar light horsemen from Hungary

45 One peculiar source should be mentioned concerning this Roslavl' unit. 'Notes of Kurosh', an extremely rare personal account written by an officer, uncovers a lot of details about the service of the Roslavl' dragoons. The problem with the source, however, is that the location of the original papers is unknown; a copy was made and published by Smolensk artist and Petrine enthusiast Yury Kashtanov with no provenance, which unfortunately makes the source unreliable.

appeared in European armies under name of hussars. Although there were Cossacks and other irregulars at hand, probably the Tsar wanted this new type of cavalry too. In spring 1707 Tsar Peter issued a decree that Serbian Colonel Filipp Apostol-Kigec raise a *voloch khorugv* (banner or squadron) out of the abovementioned nationalities. A second unit under Vasily Tansky was raised in 1708.[46] By early 1708 there were 300 Poles of Nezabitovsky, 426 *volochs* and a 169 strong unit of both Poles and *volochs*.[47] Unlike Cossacks, *volochs* received higher pay and money to buy horses; their expensiveness in the end was the reason use of *voloch* troops stopped in 1714. The Russian *volochs*, just like their Swedish counterparts, were employed in reconnaissance, raids, chasing, falling on enemy foraging parties, or stealing herds of enemy horses. Swedish *volochs* bore the Swedish field sign – a bundle of straw – on their fur-trimmed caps; otherwise they probably wore similar costume. Important was their service as couriers who knew the steppes on the Turkish and Polish frontiers. Attached to regular dragoon brigades they took part in the battles of Sokolki, Leduchowo, and Czernowcy in 1709; in general battle they stayed aside with the Ukrainian Cossacks of Skoropadsky and probably took part in the pursuit. Petrine troops also attracted enemy *volochs*: in early May 1709 three *voloch* companies deserted from the Swedish army and went over to the Russian camp. By 1711 there were six regiments of them, and in the new Turkish conflict their importance grew as the war was fought over their homeland, inhabited with Orthodox people under Ottoman rule. Fighting in the Pruth campaign they once found themselves in a tight corner, as described by de Brasey. When pressed by Tartar horse they were unable to enter a Russian square encircled with *chevaux-de-frise* and many were slaughtered before they found their way inside. After the Pruth campaign ended, many *volochs* were given leave and until 1713 the remaining *voloch* units – two regiments and four Serbian companies – fought against the Tartars who ravaged Ukraine until peace with the Ottomans was signed. In 1723 Peter returned to the idea of having light horse modelled after Austrian forces – it was then that the same multi-ethnic military group was first called 'hussars' in Russian service.

The Navy

Fleets

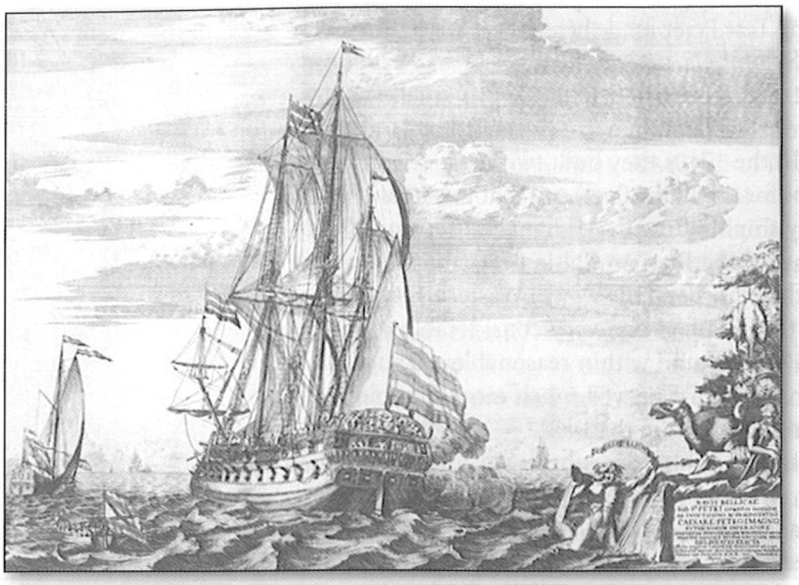
By the time of Peter's birth the only Russian sea port, and the country's gate to international trade with Western Europe, was Arkhangelsk on the White Sea. Astrakhan, in the Volga delta on the Caspian Sea, was the port for Oriental trade. Through Arkhangelsk foreign merchants imported delicious food and wine, weapons, textiles, tools, books, etc., and exported wood, hemp and furs. It was the country's only region where the local Russian population, called *pomory*, was used to seafaring and shipbuilding, and not surprisingly

46 V.I. Tsvirkun, 'Uchastie moldavan v Severnoi voine' in *Poltava. K 300-letiiu Poltavskogo srazheniia Sbornik statei* (Moscow, 2009), pp. 200–218; S.G. Suliak, 'Urozhentsy Moldavii v armii Petra I' in Vestnik SPbGU, Ser. 2, (2013), Vol. 1, pp. 16–24.

47 A.Z. Myshlaevskii, *Severnaia voina, 1708 god: ot reki Ully i Bereziny za reku Dnepr* (1901), p. 7.

it was the first place where young Tsar Peter made his first sea voyage in 1693. He established a shipyard in Solombala near Arkhangelsk that produced merchantmen. In 1694 it built one frigate and in 1702 two small frigates, *Courier* and *Saint Spirit*, that were small enough to be dragged by land from the White Sea to Lake Onega. In the 1710s they built two more frigates and then seven *Archangel* battleships for the Baltic fleet, and that was it; only later in the 18th century did military shipbuilding in Arkhangelsk resume, and it provided two thirds of all ships for the Russian Baltic fleet. The navigation season in the White Sea was rather short and the way to Western Europe was long, too. On the other hand, the area had one very considerable resource for Russia where oakwood was hard to find within reasonable distance. The yard in Arkhangelsk used larch: trees that proved much more durable than the other sorts of wood used on shipyards on the Baltic.

Despite these first trials on the White Sea, the town considered the birthplace of the Russian Navy, Voronezh, is located far south and not even by any sea. Russia's heartland was hundreds of kilometres away from the Black Sea, which was totally controlled by Ottoman Turkey and their Tartar vassals. During the 16th and 17th centuries Russia gradually repulsed the nomads' attacks and slowly but steadily colonised the southern frontier. Crimean Tartars remained the major enemy who kept ravaging Russian southern provinces and enslaving many thousands of inhabitants. Land attacks on the Crimea were to no avail, as the campaigns of Prince Boris Golitsyn in 1687 and 1689 clearly showed. Logistics of the period did not allow an army to cross such a vast land, given the scarcity of local water and fodder; troops dwindled from heat and thirst without a fight. In autumn 1696 Tsar Peter decided he would change strategy and wage war against the Ottomans at sea. The first vessels necessary to blockade Turkish Azov from the sea were built in Voronezh in early 1696 (galleys were initially built near Moscow, then brought in parts to Voronezh where they were assembled). But the decision to start building a full scale fleet only came after Azov fell, and the Tsar saw that ships can make a difference in operations. Shipyards on the Rivers Voronezh and Don were almost 1,000 kilometres from the Azov Sea. The Don, where it flowed into the sea, was too shallow for large vessels, so it was only possible to bring ships unfinished and unarmed in spring high water, the body of a ship being placed on a floating pontoon. It was the first experience of mass shipbuilding for Russia, and neither administrators nor craftsmen knew what to do; foreign shipbuilders – Dutch and Venetians – appeared to be far from ideal, too. Thus despite the horrifying financial strain, Peter's first naval enterprise in 1697–1698 turned out to be a failure. His second attempt from 1698 involved English shipbuilders, and since then the English school became predominant in Russian shipbuilding. Peter wanted no less than 20 ships of the line of high ranks. *Goto Predestinatsia* 58, designed by the Tsar in person, was laid down in 1698 and completed in spring 1700 – she was the first Russian ship of the line but in 1705 she already wanted renovation. Out of 76 ships and galleys that were ever laid down in Voronezh and on the Don, 51 were completed, 23 reached Azov, and 17 made it to the sea. The average time to complete a ship was five to six years and the term of service of a ship was about 10 years; because of the poor quality of materials and low standards, ships started rotting fast.



21. *Goto Predestinacia* 58, Russia's first ship of the line. 1701. Shortly afterwards the flag with numerous stripes was abandoned, the St. Andrew flag (blue cross on white field) was introduced for the navy and white-blue-red tricolor remained for merchantmen. (Adriaan Schoonebeek (1657–1705))

After taking Azov from the Turks in 1696 Peter started building his first naval bases on the Azov Sea, at Azov and Troitsk (later Taganrog). Separated from the mainland Russia by vast steppes, those places required enormous effort to supply them with materials and workforce. The situation of the bays was not favourable either. Both the delta of the Don where Azov stands, and the area of Taganrog were rather shallow and large ships laid 'like fish in the mud'. The high point of the Azov fleet was probably 1699 when the Tsar, with a squadron of 10 vessels, came to the Crimean fortress Kerch and then *Krepost* with envoy Ukraintsev on board went to Constantinopole. The Azov fleet in the end proved another failure: it barely operated in its own enclosed sea; it could not come out into Black Sea because the passage was blocked by Kerch. The fleet also did not contribute in the war against Turkey in 1710–1713 where only four completed Russian ships opposed 16 Turkish ships and its fate was determined in a land theatre. In 1711, per agreement with Turks on the River Pruth, Russia was obliged to erase her bases on the Azov Sea: fortifications were levelled, ships sold to the Turks, the population resettled northwards and guns transported thither too. It was only after Peter's death that the Russian government returned to expansion in this direction; it appeared that there was no alternative to land routes into Crimea. Nevertheless, the experience of Voronezh and Azov helped in the north.

In 1701 quantities of river small craft were built in yards at Novgorod on the River Volkhov and in Onezhitsy on the River Luga. In 1702 Sheremetev started building boats in Pskov on the River Velikaya. They provided the army with the necessary vessels for transporting cargoes, and for riverine and lake actions against the Swedish Peipus and Ladoga flotillas.

Olonets shipyard (nowadays Lodeynoye Pole) was established in 1702 on the River Svir, near to where it flows into Lake Ladoga. It produced frigates and small crafts and remained the main shipyard of the Baltic fleet until 1707–1708. Another yard started in 1702 on the River Syas, but it produced fewer and smaller vessels. One more shipyard operated in the town of Novaya Ladoga on the River Volkhov, where it runs into Ladoga; it built the two first ships of the line for the Baltic fleet in 1708–1710, *Vyborg* and *Riga*. All vessels built in yards on Ladoga had to pass through the vast lake that was known for its severe storms (in 1712 a new ship of the line from Olonets was wrecked in a storm there). They then went via the 70 km-long River Neva, with rapids, to get to the sea.

After St. Petersburg appeared on the Neva river in 1703, several smaller shipyards started working there almost immediately. The Admiralty shipyard

was established in late 1704 and finished by 1706, a rectangular bastioned fortress in the centre of the future capital city. Ship of the line *Poltava* was laid down there by the Tsar in December 1709. The Neva being too shallow, unfinished ships were transported from thence to Kotlin Island for completion and armament, which was a troublesome process, too. By 1709 it became obvious that oakwood in north-west Russia almost extinguished and Peter decided to cut and bring oakwood from Kazan on the River Volga. That was thousands of kilometres away from St. Petersburg, so the transportation of oakwood turned out to be extremely expensive and lengthy.

Kotlin Island with its fortifications and Fort Kronshlot was instrumental for defending St. Petersburg from attack by sea. However, in war years it was not good enough for a naval base. In 1709 a bay was begun with a breakwater and piers, but the waters were generally shallow for large ships and the water being almost fresh, the ships' wood would rot faster than it usually did in seawater. It was only later in the 18th century that Peter's descendants developed Kronstadt, a town built on an island, into a more convenient base which remains in this role today.

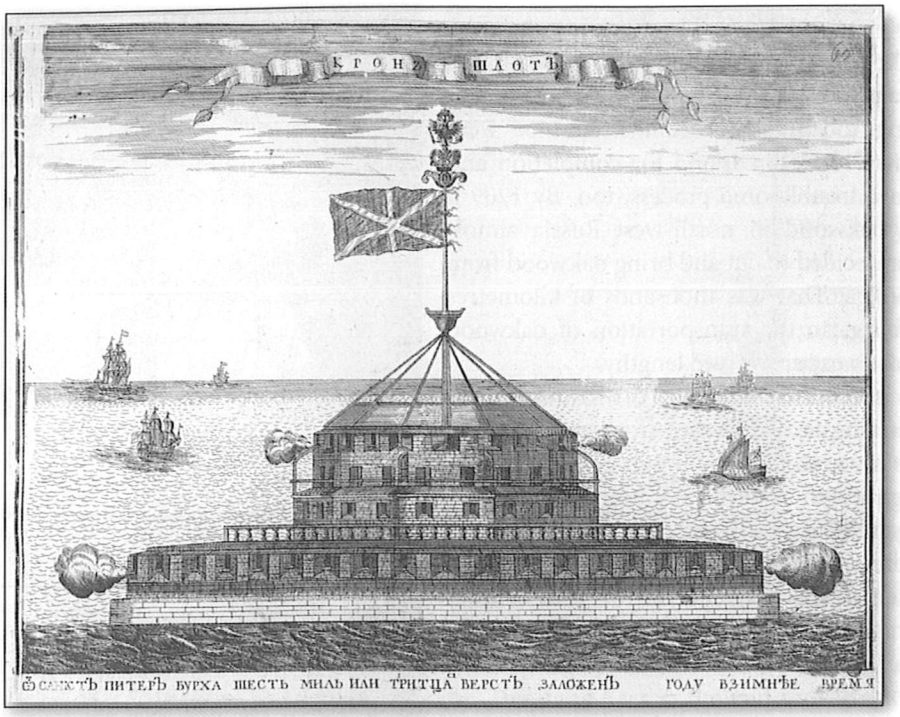
By 1713 when the Baltic fleet considerably grew, the bay at Kotlin became insufficient for sailing ships. Moreover, it was too distant from the open Baltic Sea and it froze in winter. Peter wanted a port more to the West, and the only available option was Reval, where ships were based from 1713. The Reval bay was weakly defended and suffered from storms, so later the Tsar decided to build a base in Rogervik bay west of Reval, deeper and located where the Gulf of Finland entered the Baltic Sea. But the war-weary country could not afford such an enterprise then, and works began after the war ended; this base in the 20th century was known as Paldiski. The galley fleet had its bases in the captured Swedish towns of Vyborg, Helsingfors, and Åbo.

An even greater challenge for the Petrine administration was providing the navy with personnel.[48] In the early years of the war the officers and a considerable proportion of the sailors on the Russian sailing fleet were foreigners. The first native Russian sailors who took part in Peter's amusement manouevres, in the Azov and Kerch campaigns, were soldiers of the future Guard regiments. Some of them were sent to Europe to learn and to get

22. Recreated kit of a sailor. Reenactment group "Preobrazhensky Life Guard Regiment, 1709". (Photo by Olga Kovtunova)

23. The double eagle under imperial crowns bearing maps of four seas of Russia – White, Caspian, Azov and the now regained Baltic. (Rastrelli, Nartov; author's photo)

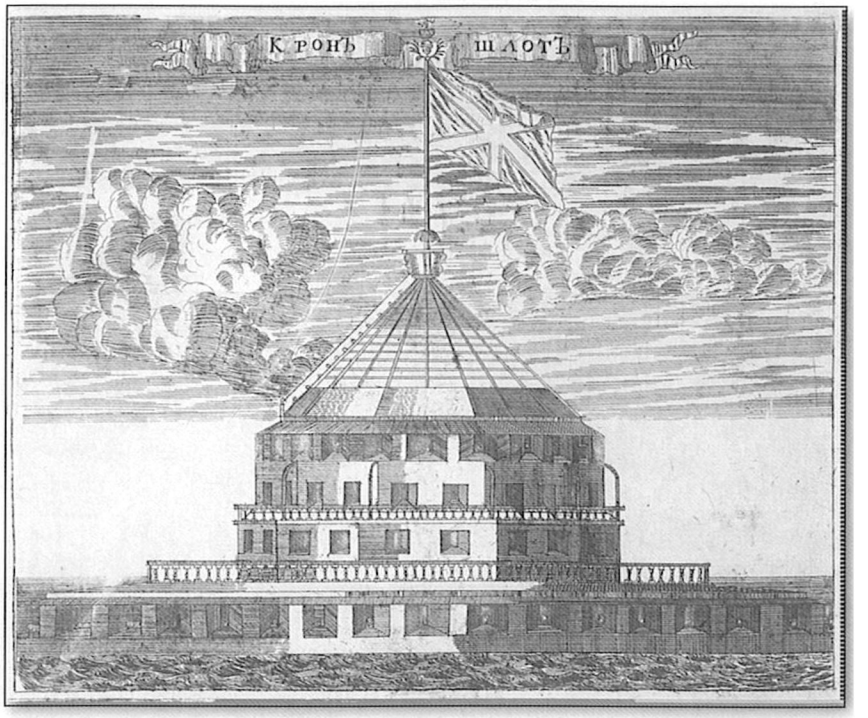
48 F.F. Veselago, *Ocherk russkoi morskoi istorii* [Outline of Russian maritime history]. Part 1. (SPb, 1875) p. 408–416; Krotov, P.A., 'Kistorii rossiiskogo flota: matrosy – "zamoriane" pri Petre Velikom' [To the history of Russian navy: sailors who went overseas in times of Peter the Great] in *Otechestvennaia istoriia*, (1995), 5, pp. 162–168.



24. Fort Kronshlot, built 6 miles or 30 verst from St. Petersburg in winter time. 1717. (Pieter Picart (1668–1737))

practice in navies of maritime powers; among them were Fedor Urusov, Naum and Ivan Sinyavin, Boris Kurakin, and others. Common folk from Arkhangelsk also went overseas and overall about 300 men were thus sent abroad starting in 1698. Many of them then served on English or Dutch ships, took part in naval campaigns of the War of the Spanish Succession; some fought at the Battle of Vigo Bay, some were wounded in combat, some were captured by the French. A party of 23 men spent two years in the Netherlands and returned in 1705; others spent up to 10 years abroad. Upon return these now experienced and highly skilled sailors were promoted to 1st class sailors or NCOs. Sending men overseas continued later when graduates of the Navigation School were sent thither after 1706; in 1716, 60 noble gardes-marines went to England, France, Venice, and Spain.

The first considerable inflow of native Russians into the Azov fleet was in 1700 when 1,104 recruit soldiers were transferred to become sailors. The first special draft of sailors was in Moscow in 1702, when 1,300 men enlisted. When the Baltic fleet emerged and needed men, 'all foreigners, Russians, prisoner Tartars and Turks who are used to seafaring on galleys' were ordered to be moved from Azov to Olonets in December 1703. A special draft for the Baltic fleet started in February 1704 when 1,000 men were recruited; it was repeated in 1706, 1712, 1714, 1715, 1717, 1718, 1720 and 1721. The men were volunteers and draftees; age limits varied from 15 to 20 or 25 years old; they came from inner regions, although special attention was paid to recruit from the areas where people were accustomed to living by big rivers and lakes, to fishing or hunting at sea. In 1718 and 1720 they took soldiers from the Corps of Finland because they were used to galley operations. In spring 1721 a special decree in St. Petersburg invited 'all men except for the Swedish nation' to volunteer in



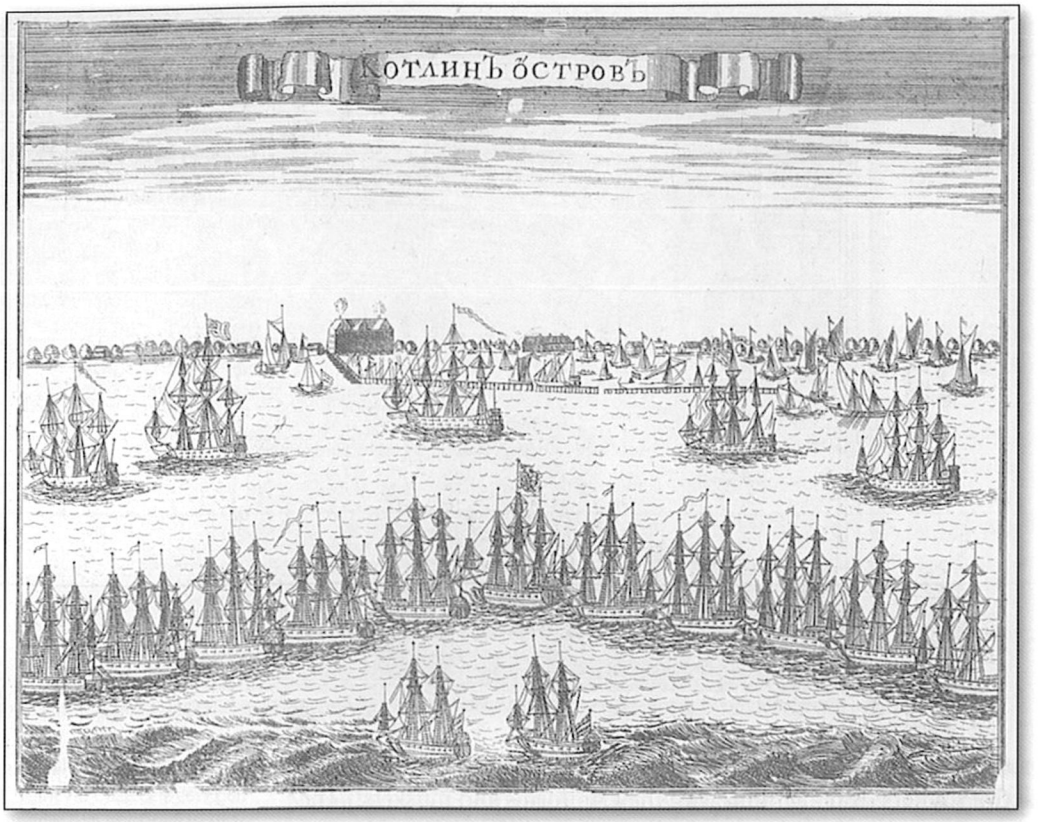
25. Fort Kronshlot. This fortress flag was also used on ships as bow flag: blue and white crosses on red field. (Alexey Rostovtsev (1690–1746))

the navy; such a surprisingly vague wording led to enlistment of many serfs and even active soldiers (leaving ranks with their uniforms and muskets!) The share of native Russian sailors thus gradually increased throughout the war years and by 1721 there were no more foreigners among 7,125 sailors.

The galleys in Azov were manned with convicts – participants of the 1698 *streltsy* riot (the Turkish word *kadirga* means galley, in Russian transformed into *katorga* which now meant penal servitude in general) – with prisoner Tartars and Turks. For the Baltic, besides the abovementioned categories, they hired Russian labourers; for example in 1705 peasants from the lower Volga, accustomed to rowing, received a money wage and were to be treated 'not like galley prisoners'.

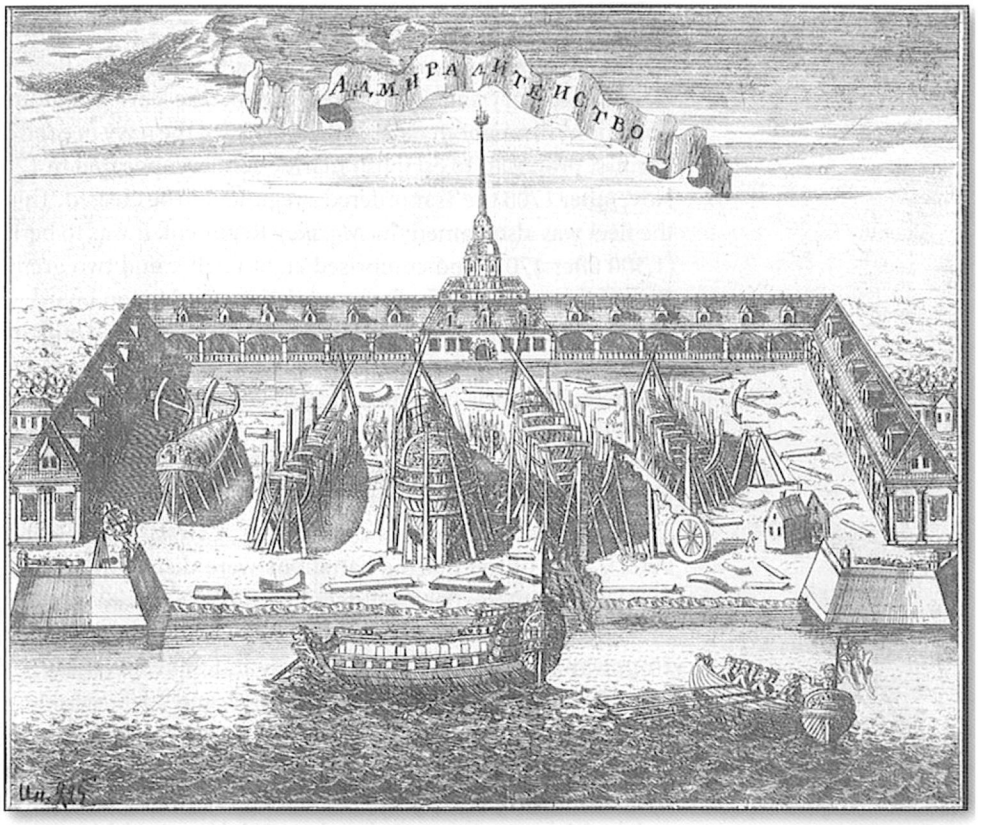
Charles Whitworth in March 1705 reported that in the Azov fleet there were 'not above three able seamen on board each ship, the rest being Russians, who have not yet learned their trade.'[49] The able seamen, thus, were foreigners who constituted the majority of early Petrine sailors. One of the first to accept the Russian offer was Captain Cornelius Cruys, 1st Equipagemeister of the Amsterdam Admiralty. He received the rank of Vice-Admiral and then helped to hire other personnel. In 1697–1698 up to 700 officers, NCOs, doctors, craftsmen, and sailors were hired in the Netherlands and England; they were mainly Dutch with many English, Danish, Swedish, Greek, and Venetians, too. In 1702–1703 Cruys went to the Netherlands to hire 188 more NCOs and officers. Russian agents hired 150 officers and NCOs in 1714, and 200 in 1715. In 1717 in Amsterdam they hired 1,500 sailors. While normally they would be volunteers, in extraordinary cases men were taken forcibly: in 1705

49 *Sbornik IRIO*, T. 39, p. 60.



26. The fleet off Kotlin island. 1717. (Alexey Rostovtsev (1690–1746))

in Arkhangelsk they pressed into Russian service 120 sailors from Dutch cargo ships – this measure was to be avoided for it caused issues with foreign merchants and diplomats. Foreigners enlisted for a fixed term, however in many cases they were rejected before the end of it: for example in 1699–1701 most of a recently hired 589 were terminated as they were found unfit for service. In 1718 the Russian government decided to give leave to the majority, and in autumn 1721 to the remaining foreign rank and file sailors, for there seemed to be now enough native Russian seamen. Foreign officers and specialists were instrumental in years when there were no qualified Russians; foreigners were to train and instruct natives so that they could step in. Whilst all senior navy officers were inevitably foreigners, they were rarely given independent command: a Russian official (for example, General-Admiral Fedor Apraksin) was above them even if he was less skilled as a seaman. First, he was more loyal; and second, he observed impartiality in quarrels of officers of different nations – this was often the case between the Dutch and the English. Galley officers were often Greek and Italian (to be more precise, subjects of the Venetian Republic, many of whom where Mediterranean Slavons – Croats, Montenegrins, Serbs, etc.). Deane wrote in 1723 that the Tsar had of those nations one Vice-Admiral, two Captain-Commodores, about 20 Captains, as many Lieutenants and 40 NCOs for example boatswains. For the galley fleet was separated from the sailing fleet, and service in it was viewed inferior: 'the officers of the men-of-war seldom care to converse much with these people; partly on account of their different languages and manner of living; but more out of abhorrence of the



27. The Admiralty shipyard in St. Petersburg. 1717. The Admiralty golden spear with a ship on top is one of landmarks of St.Petersburg, since then and until today. (Alexey Rostovtsev (1690–1746))

great barbarities they have sometimes practised upon an enemy, when in their power; nor are the latter allowed to rank with them upon a foot of equality.'[50]

Marine Infantry

Peter's first experiment with placing soldiers on board was in 1696, when he put together 28 companies from Lefortovsky, Preobrazhensky, and Semenovsky Regiments and called them the Marine (*Morskoy*) regiment.[51] They manned 28 galleys which travelled down the River Don to the second siege of Azov. Besides travelling on board they fought on land, and after the campaign ended this temporary unit ceased to exist as its companies returned to their parent regiments. Another marine-type unit was raised in Astrakhan to man 13 yachts built in Kazan. This 'Yachts Regiment' initially was to include soldiers of Colonel Ivan Meyer; in 1701 navy Captain Jeronimus Meyer recruited 31 foreigners and 250 workers to be soldiers on yachts. Every soldier was issued a fusil with a bayonet and pair of pistols. This squadron was to roam the Volga and the Caspian Sea to

50 [J. Deane] Vice-Admiral Bridge, A.G. Cyprian (ed.), *History of the Russian fleet during the reign of Peter the Great by a contemporary Englishman* (1724) (Navy records society, 1899). p. 94.

51 This section is based on two major works: V.G. Danchenko, *Morskie soldaty Rossiiskoi imperii* [Marine soldiers of the Russian Empire], (Moscow, 2006); A.V. Kibovskii, O.G. Leonov, *300 let rossiiskoi morskoi pekhote* [300 years of the Russian marine infantry], T. 1 (1705–1855), (Moscow, 2007).

defend merchants and chase pirate Cossacks.[52]

The true marine infantry emerged after the Baltic fleet came into being. Despite ordinary infantry continuing to take part in landing and boarding operations throughout most of the war years, the navy needed dedicated troops. The first proposals to establish marine soldiers appeared in 1704, and finally in November 1705 the Tsar ordered a regiment to be created. This special force for the fleet was also named the *Morskoy* Regiment, it was to be 1,200 men strong (1,500 after 1707) and comprised eight fusilier and two grenadier companies. One of them was the Tsar's personal convoy when on board.

By 1712 men of the Marine Regiment were so much accustomed to the naval service that its soldiers were converted into sailors (lack of fit sailor recruits was a perpetual problem for the land empire) and the unit was effectively disbanded. Instead of the Marine Regiment, three infantry battalions were the same year transferred to the fleet in St. Petersburg and named after squadrons of the sailing fleet – the Admiral's battalion (Fedor Apraksin), Vice-Admiral's (Cornelius Cruys) and Rear-Admiral's (Tsar Peter). Men of the marine battalions were distributed among vessels of the fleet. For example, per navy regulation of 1720 a 90-gun ship had 800 crew including 60 cannoniers, 410 sailors, 206 soldiers and 26 sentry soldiers; a 76-gun two-deck ship – 40, 241, 121, and 20 respectively; a 50-gunner – 30, 160, 80, and 16; a 32-gunner – 20, 79, 40, and 13.

The galley fleet in 1707 per the Tsar's order was to be given only 200 men from the Marine Regiment, which was not enough. Galley Rear-Admiral Bocis wanted special galley soldiers who would take part in combat and watch prisoner-oarsmen; thus by 1711 he raised his own galley grenadier company to man his flagship galley. In 1712 a galley battalion of three companies was raised. This probably sufficed, as the galley fleet after 1712 mainly had infantry soldiers on board.

Whilst marines mainly served on board ships and galleys, or in ports, the navy also needed soldiers to guard shipyards and stores, convoy goods and personnel, so a dedicated Admiralty battalion of five companies was created in St. Petersburg in 1712.

52 G.V. Esipov, *Sbornik vypisok iz arkhivnykh bumag o Petre Velikom* [Collection of extracts from archive papers about Peter the Great], T. 2, (Moscow, 1872), pp. 294–295.

2

Materiel

Infantry Weapons

Muskets

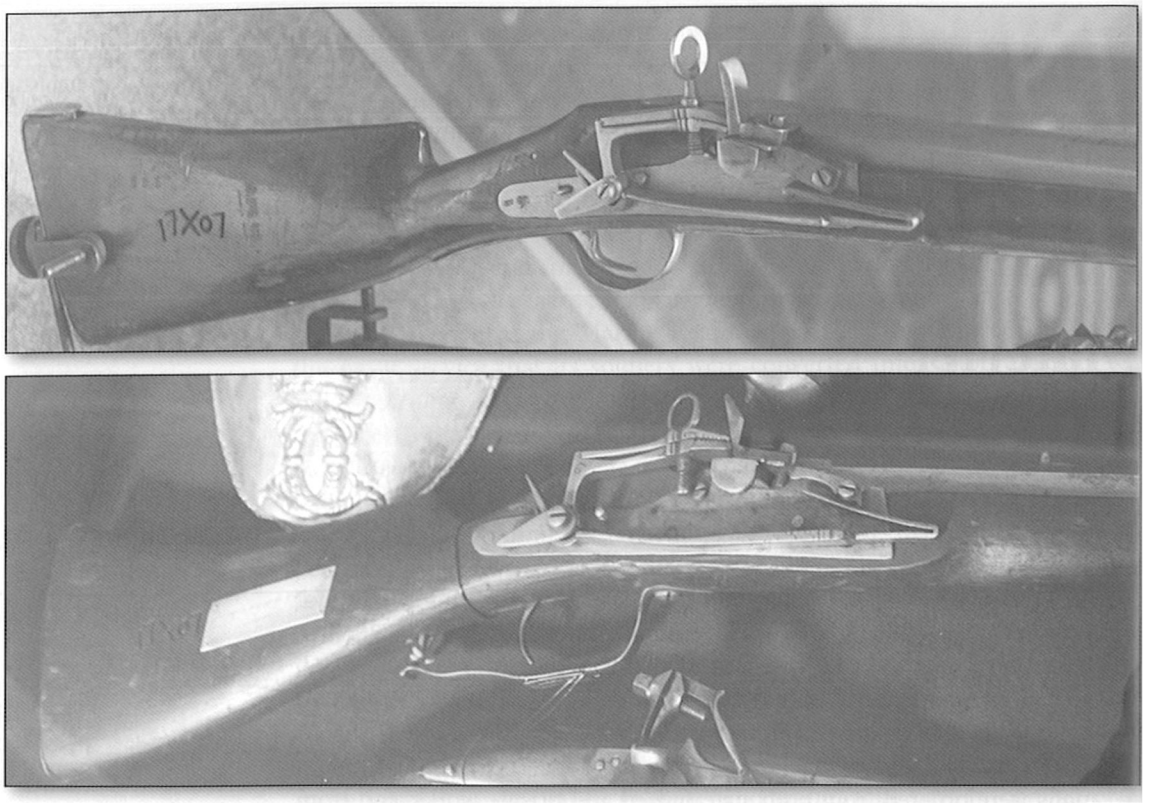
Firearms used by Petrine troops were both imported and homemade; for example between 1697 and 1701 the Kremlin Armoury received 30,720 guns made in Tula works and 31,754 foreign guns.[1] Within Russia manufacturing of small arms took place in Moscow in the Kremlin Armoury (*Oruzheinaya Palata*) and in the Ordnance (*Pushechny Dvor*), as well as in other regions such as the Tula, Lipetsk, Olonets and Petrovskie works (Petrozavodsk today). Weapons were ordered from both state-owned and private works, and from individual manufacturers. Since there was no single standard model (at least as far as is known), exemplary pieces were sent to manufacturers to be copied. One finds several mentions of examples sent to the Tula works in 1707 ('new model'), 1709 ('per exemplary overseas fusil'), in 1712 and 1713 some soldiers' and Guards' models were produced. Works in Petrovskie and Lipetsk had their own models, e.g. 'grenadier fusils with short bayonets', 'fusils with long bayonets of Swedish type' and 'fusils with short bayonets of Olonets type' were manufactured in Lipetsk in 1712. The quality of native manufacturers was not always satisfactory: in 1708 James Bruce, Master of Ordnance, requested that Dutch guns were supplied because fusils made in Tula exploded too often and injured men.[2] A batch of Olonets-made fusils arrived in April 1706 and the Tsar wanted to issue it to the Guards,[3] however they later received Dutch guns.

An attempt was made to introduce a universal calibre of 17 mm for both fusils and pistols in 1713, but for some reason it failed and the first unified models of firearms were established in the Russian army by the Tsar's decree from 24 May 1715. The infantry fusil bore was set at .78 calibre or 19.8 mm; length 1,422 mm overall and a 1,016 mm barrel. These parameters generally

1 E.V. Myshkovskii, 'Ruchnoe ognestrelnoe oruzhie russkoi armii perioda Severnoi voiny 1700–1721' [Small arms of the Russian army during the Northern War 1700–1721] in *Sbornik issledovanii i materialov Artilleriiskogo istoricheskogo muzeia* [Compendium of studies and materials of Artillery Historical Museum] (Leningrad, 1959), Vol. IV, p. 70.

2 D.P. Strukov, *Arkhiv russkoi artillerii* (SPb, 1889), T. 1. (1700–1718), p. 213.

3 *Pisma i bumagi*, T. 4, p. 228.



28. Snaphaunce muskets at the Tula Arms Museum and Artillery Museum, St. Petersburg. The mysterious "17X07" snaphaunce, one of many of this type sometimes erroneously referred to as the Russian 'Hartman' fusil. More viable explanations name them as trophies taken from the Swedes in 1709. Either way, they are a rather archaic model for the early 18th century. (Author's photos).

replicated those of a known period Dutch musket. Surviving 1715 model muskets weigh 5.0–5.5 kg. The barrel in the breech was either faceted (octagon) or all round and attached to the birch tree stock by three hooks (i.e. no stock bands). Iron fittings included three ramrod pipes, a heavy butt plate, trigger guard and side plate. The works name (e.g. TULA or OLONEZ) and year of production was often stamped or engraved on the breech and on the lock plate (in Tula after 1714). The model flintlock was not a doglock, although a 'dog' was often added – probably in the course of repair. Swivels were placed on the fore stock and on the butt. Manufacturers had their variations of the 1715 model, e.g. those in Petrovskie had the stock painted black, an all round barrel and a lower swivel attached over the trigger guard; Lipetsk made fusils with the stock painted red. A thick wooden ramrod was also a feature of early 18th century arms that is often overlooked in modern representations.[4]

Despite local production gradually increasing, import remained a considerable, if not predominant, source of small arms throughout most of the war years, until 1715. For example between 1706 and 1708 two foreign

4 L.K. Makovskaia, *Ruchnoe ognestrelnoe oruzhie russkoi armii kontsa XIV–XVIII vekov. Opredelitel* [Small arms of the Russian army in the late 14th–18th centuries. Identifier], (Moscow, 1992), pp. 23, 24, 32, 33.

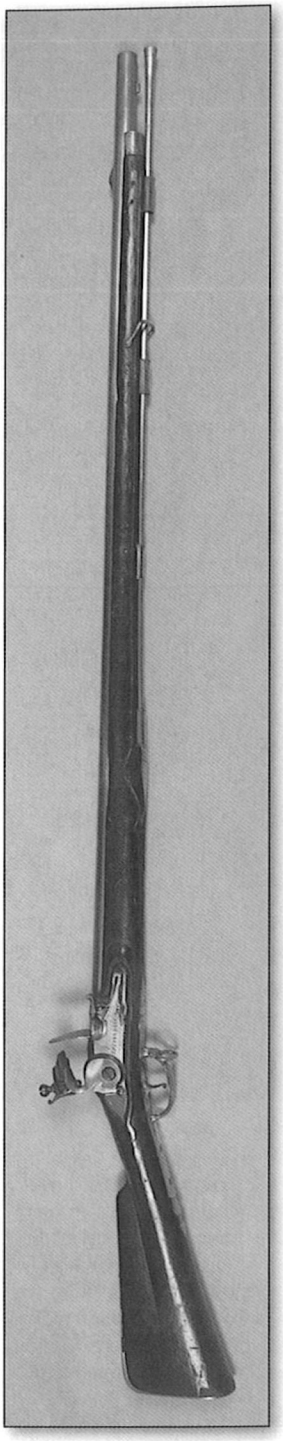
merchants supplied to the Armoury 25,050 fusils of four types with or without bayonets, 25,058 musket barrels, and 58,420 flintlocks. In 1706 Dutch merchant Johan Lubs purchased and brought from Holland 17,792 'flat doglocks' and 5,000 'common' locks, many of the former of which had rings – most likely the jaw screw had a ring on top instead of jaw screw with groove.[5] In August 1708 Peter gave order to Moscow commandant Colonel Gagarin that a batch of 20,000 doglock muskets of one calibre was purchased abroad in anticipation of the coming campaign.[6] Sometimes guns were assembled locally out of imported components – such as in Tula in 1707 where 4,000 barrels and locks were sent in to make the remaining parts and produce complete fusils. The Swedes observed that the majority of muskets they captured from Russian soldiers in the early years of the war were Dutch. The archaeology at the location of the 1714 Russian shipwreck on the Finnish shore includes a side plate with an 'Amsterdam' marking on it which confirms the fact that this was a very popular source of weapons. A similar plate is found on a Dutch musket in the Kremlin Museum attributed to the 1680s–1700s.

The Guards normally received Dutch muskets, although some inflow of other models occurred. Upon the Swedish surrender at Perevolochna, shortly after the Battle of Poltava, certain number of Swedish guns were distributed among the companies of Semenovsky.[7] In 1715 Lieutenant-General and Guards colonel Prince Dolgoruky wrote to the Senate that the Preobrazhensky and Semenovsky Regiments traditionally used to have 'weapons of Amsterdam calibre' but at that moment they had besides some 845 pieces of Tula, Olonets, or Swedish manufacture of varying calibres that needed to be replaced by new Tula guns of the Dutch calibre.[8]

Considerable numbers of Swedish muskets were taken in captured towns and in battle, and registers of trophies were often published in the news. This, however, does not necessarily mean that captured weapons were automatically issued to Russian units. Still, there is much evidence of use of captured weapons. In July 1706 Menshikov asked the Tsar that 300 Swedish dragoon fusils be taken from the Guards and transferred to Menshikov's troops.[9] In January 1711 the army of Field Marshall Sheremetev received from the captured Riga armoury 3,000 Swedish fusils of varying

29. Fusil model 1718 manufactured in Tula for the Prussian giant guardsmen ('Potsdam Giants'). It later became the model for the Russian guards. Artillery Museum, St. Petersburg. The wooden ramrod was typical of period weapons. The iron ramrod was introduced in Russian fusils in 1731. (Author's photo)

5 *Pisma i bumagi*, T. 4, pp. 963, 1111.
6 *Sbornik IRIO*, T. 11 (1873), p. 116.
7 *Arkhiv kniazia F.A. Kurakina* [Archive of Prince F.A. Kurakin]. T. 3. (SPb, 1892), pp.128–129.
8 Archive of VIMAIViVS, F. 2, Op. 1, D. 179 (1715), pp. 77, 78.
9 *Pisma i bumagi*, T. 4, p. 971.



30. Russian flintlock fusil manufactured in Systerbeck (Sestroretsk), 1737. Courtesy of Army Museum, Stockholm. This is what most muskets looked like, save the iron ramrod.

calibres.[10] Regimental records published by Tatarnikov show Swedish items issued to some regiments. For example, in 1713 – perhaps after the taking of Stettin – the Rostovsky infantry regiment received 216 Swedish fusils, Ingermanlandsky 198, Vyatsky 107, and Butyrsky 95.

Firelock type can sometimes be discerned from the sources, although not always. The drawings of Weide's 1698 report show rather typical French-style flintlocks such as the one on the 1715 model. Excavated locks from Russian 1700 positions in Narva are very much the same style. Doglocks were popular too: on the Dutch piece in the Kremlin one finds a doglock with a flat cock. However, it looks like some other type was popular earlier in 1690s. In 1697 blacksmith Ignaty Vasiliev supplied 5,000 muskets with 'Scottish' firelocks made according to an exemplary piece. In 1696 foreign merchant Daniel Hartman was to supply 10,000 muskets 'with brass fittings and Scottish firelocks according to sample.'[11] This means that the Scottish snaphaunce lock was in some use, too. A variety of snaphaunces found in Russian museums nowadays (Russian type, Karelian etc., all vaguely known as Baltic) come from old armouries and monasteries and it is hard to tell if they were actually used by Petrine troops.

Supplies from this Hartman led later in the 20th century to a popular, albeit questionable, belief. All the popular literature after Viskovatov claims that there was some 1701 pattern musket that looked like a snaphaunce. Other third-hand books also call this model 'Hartman's fusil', and say it was a copy of a Swedish musket (Scottish being misread as Swedish). To make things more complicated, in many museums of Russia and the ex-Soviet Union, collections include identical snaphaunce flintlocks with the mysterious marking '17X07' on the side of the butt ,and while in most places they are attributed as Swedish trophies (Artillery Museum, State History Museum, Poltava Museum etc.) in other places, for example the Tula State Museum of Arms, they call the identical piece a 1701 pattern, based on Viskovatov most probably.

Infantry guns almost universally were referred to as fusils, i.e. flintlocks. No mentions are found of matchlock muskets – while they were still used in the Swedish army in early years of the war,[12] nothing reveals its use in the Russian forces, at least in the field army. Moreover, when releasing Swedish garrisons out of fortresses upon capitulation, Russians gave away to Swedes (to their dissatisfaction) old matchlocks from the town armouries instead of flintlocks, implying matchlocks were deemed useless trophies.

10 B.P. Sheremetev, *Feldmarshal graf B.P. Sheremetev. Voenno-pokhodnyi zhurnal 1711 i 1712 g.* [Field Marshall Count B.P. Sheremetev. Military campaign journal of 1711–1712] (SPb, 1898), pp. 1–2.

11 L.K. Makovskaia, *Ruchnoe ognestrelnoe oruzhie* (1992), p. 23.

12 A Russian envoy in Stockholm, Andrey Khilkov, was arrested at the start of the war and recorded that he was guarded by soldiers 'with guns loaded and slowmatch burning') (N.G. Ustrialov, T. 4, part 2, p. 160).

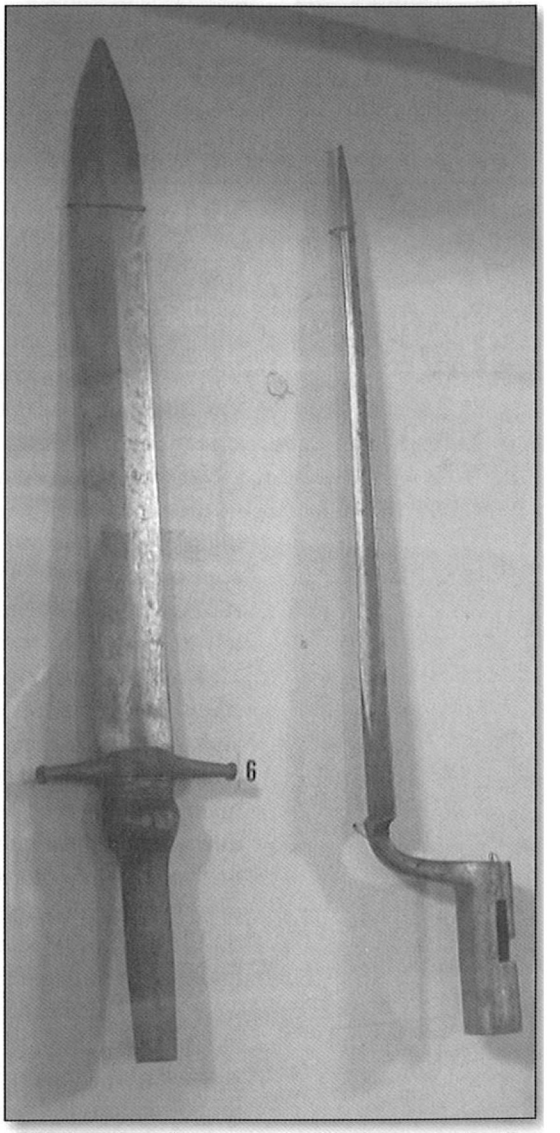
To summarise, a typical musket of the Russian infantry during the war years was either a home made or imported (most often Dutch) fusil, it had a French type flintlock or dog lock, or less often a snaphaunce, a wooden ramrod and no stock bands. Thus Viskovatov's illustration showing 'patterns of 1701, 1710, 1717 and 1723' is desperately incorrect as not only there were no such established models, but also those shown in Viskovatov represent some later versions with barrel bands which were not used by the period gun makers.

Bayonets

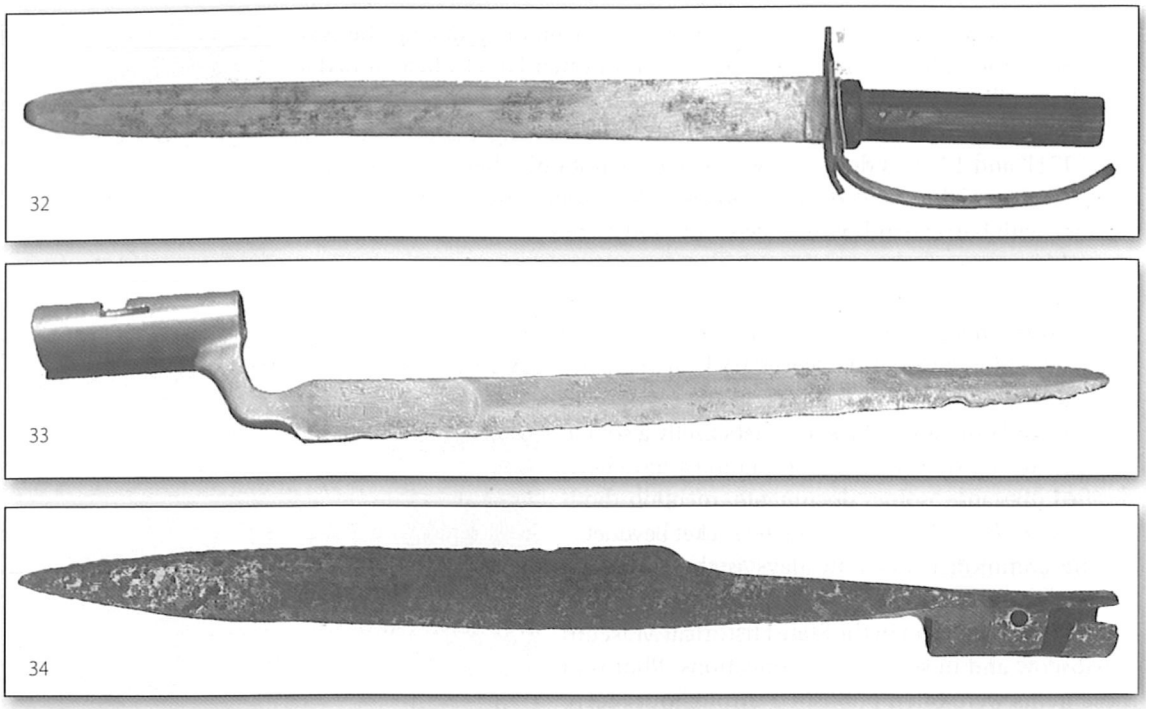
The word '*baginet*' in Russian nowadays unambiguously means the plug bayonet. However back in the early 1700s they could have used this term for any type of bayonet, and one cannot be sure what exactly a source text may mean. By 1704 the wording must have been clarified, because some documents mention both *baginet* and *shtyk*, the latter being the socket bayonet.

The common belief nowadays is that the early Petrine bayonets were the plug bayonets with an iron bail, that can be found in the State Historical Museum in Moscow and in some other collections. Photos of these items were often published throughout recent decades, and most importantly they were depicted in Viskovatov as the proven model of bayonet prior to 1708. However too often it is impossible to tell if the surviving items were actually in use by troops, when they arrived, and when they were dropped. Source documents from the 1700s say that the bayonets then had a brass hilt and a wooden handle with a spring on it. The musket barrel (*sic*) had a ring soldered to it in order to lock the spring of the handle and thus fix the bayonet. Either it was some more complex model of plug, or perhaps the 1700 model was a ring bayonet that allowed loading and firing a musket with bayonet fixed. No such items as far as we know have survived in the museum collections of Russia; archeology finds show some remnants that arguably might be it and the closest object we can find nowadays to visualise it is the Swedish m/1692 ring bayonet in the Army Museum.

Whatever the 1700 model of bayonet was, it was soon replaced. Documents from 1702 and 1703 show manufacture of a 'crooked triangular bayonet' with socket and screw, and the same definition can be found in 1707; obviously it was *shtyk*, the socket bayonet. Recent research in available regimental records shows that as early as in 1704, in the selection of 25 foot regiments, 52 percent or 13 regiments had socket bayonets while only 28 percent had the earlier model of bayonet. This effectively undermines Viskovatov's statement that socket bayonets did not



31. Plug bayonet and socket bayonet with three-edged blade. Artillery Museum, St. Petersburg. (Author's photo)



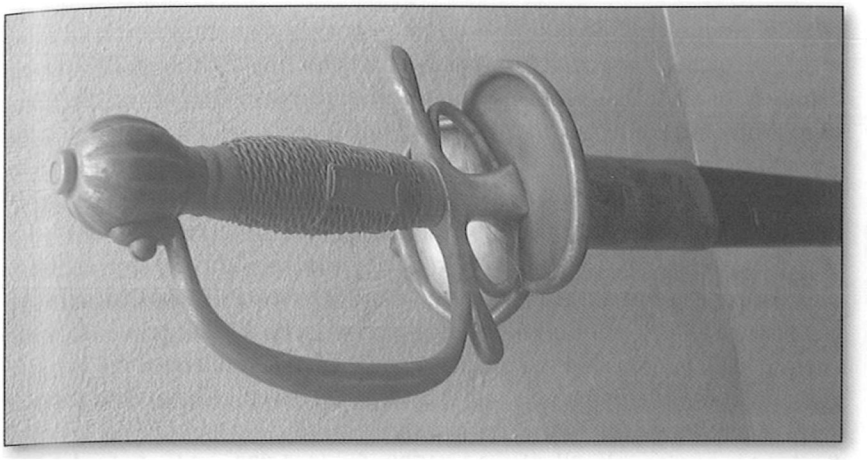
32. Plug bayonet that was probably used for Viskovatov's illustrations. State Historical Museum, Moscow. (Author's photo)
33. Socket bayonet with two-edged blade. Exhibited in Hermitage at 300 Poltava anniversary exhibition. (Author's photo)
34. Socket bayonet with single-edged blade. Excavated on the battlefield of Napue, 1714. Private collection. (Author's photo)

appear before 1708. The army started receiving socket bayonets no later than 1702 and many regiments had them by Poltava, but it is still probable that a few units retained plug (or ring) bayonets then.

The mechanism for fixing of the socket was probably the butterfly thumb screw, as on Swedish models of the period. Fixing with a cranked cut on the socket probably became a predominant method a little later.

The triangular blade became the standard type over time, but despite its mention as early as 1702 we can assume that blades were of varying shapes during the years of the war. An alternative was a flat blade such as that found on early Dutch and Swedish bayonets. In 1707 the Tsar wrote that a new model of bayonet should be introduced where the blade had a knife shape that was supposed to be useful for soldiers to cut fascines. In 1708 the Guards had triangular bayonets with a screw. In 1714 Peter ordered that bayonets were made per the Swedish pattern.

The length of the blade was important, and a Polish observer in 1701 wrote that the muskets of the Russian Guardsmen were longer than those of the Saxons, and their bayonets even longer. Still, there were varying models and some had relatively smaller blades, such as occasional 'grenadier fusils with short bayonets'. One thousand plug bayonets manufactured in 1706 for the navy were to be '33 and 36 fingers long'.



35. Hilt of an infantry sword. Artillery Museum, St. Petersburg. (Author's photo)

Swords

The infantry sword was not issued to foot regiments in 1700 as far as available sources say. However, shortly afterwards they did start issuing swords. At the battle of Narva the Troitsky regiment lost 1,068 muskets and 1,030 bayonets (out of 1,200 kits issued earlier that year); in 1701, in order to substitute losses, the regiment received 961 muskets, 50 bayonets and 835 swords – this is one of the earliest known occasions when Peter's new infantry received swords. Regimental reports from February–April 1701 show that four foot regiments did have swords, and in 1704 already half of the 26 foot regiments had swords. The introduction of the new kit must have been completed by 1709 when the majority if not all of the field infantry had received swords.

The exact pattern of the sword is unknown. Surviving items in museum collections represent both brass and iron hilts; in some regimental records, including those of Preobrazhensky, brass hilts are mentioned in the 1700s, but Tatarnikov suggests that in line infantry iron hilts dominated in the 1700s and brass became widespread in the 1710s. Sword blades as a rule were between 80 and 100 cm long and 2 to 4 cm broad, a lozenge or lens shape in section with two cutting edges and a sharp point. Officers' swords might have had a hexagonal shape in section and on many surviving items there are engraved slogans such as 'Vivat Zaar Peter Alexevitz' etc.

The sword (*shpaga* – small sword) was not the only type of cold steel for infantry. Another popular type was the *palash*, the broadsword, which appeared to be not exceptionally cavalry weapons. In 1712–1714 about a quarter of the infantry were armed with them. The broadsword blade was usually as long as that of the sword, but more broad – between 35 and 50 mm and most often lens-shaped in section with two cutting edges.

The least-used type was the *tesak* or cutlass with a single cutting edge – it is found in three regimental records and only in dozens, which means they were most likely reserved for NCOs or grenadiers. Just like firearms, cold steel was purchased abroad as well as manufactured locally.

Pikes

It is hard to tell how widely pikes were used in the Russian infantry on the eve of the war, before 1700. The *streltsy* regiments in 1696 had up to 200

pikes per regiment; the pikes often had pennants. General Patrick Gordon recorded in his diary in 1698 that he observed in Moscow a 300-strong battalion of infantry (probably *vybornye*) where two out of six divisions were armed with pike, six flags marched in the centre of the formation with grenadiers in front of it.[13] In the same year Major Adam Weide presented to the Tsar his report about European military, among other matters he wrote that pikes were nearly totally abandoned by that time and muskets with bayonets were used in their stead. Probably because of this the new infantry created in 1700 did not have pike: the available sources show that muskets were issued to all lower ranks. But the first clash with Swedes proved that the enemy made good use of the pike and this, perhaps, influenced the Russian commanders. Regimental documents – those few that have data for the early years – show that some units nevertheless did have pike. The Permsky Regiment was issued with them in 1700: for its 1,073 men received 1,000 muskets, halberds for the NCOs, and 192 pikes, which means that the latter was a surplus weapon and may have not been used at all, but if it was used, the musket to pike ratio was less than the traditional one third. In 1701 the Troitsky Regiment, having lost nearly all its bayonets in the Battle of Narva, received 436 pikes, but this does not mean they were necessarily in use: in 1702 they gave away 120 and in 1706 they dropped the remaining 316 pikes. Regimental reports from early 1701, revealed by Velikanov, show that pikes by then were in all Weide's Division and in one unit from Golovin's Division. Whether they were issued to replace lost muskets after Narva or were issued from the outset is not clear. Repnin's regiments that did not take part in the battle did have pikes, according to the abovementioned reports.

Having weapons in stock does not mean they were actually brought to the field. However the Campaign Journal of Field Marshall Sheremetev from 1704 contains data about weapons actually lost in action by regiments during the storms of Dorpat and Narva. And out of 25 units for which we know their armament, in 11 units pikes were mentioned among their arms. Thus, although we cannot tell how many pikes were actually carried, we know that they did exist in certain regiments. Source data being scarce, it seems that use of the pike was neither regulated nor universal then.

When in November 1705 King Augustus wrote lengthy proposals on improving the Russian army, among other things that the Tsar agreed with and ordered to be implemented was the issuing of 200 pikes per battalion to be carried in carts to be used on occasion; Peter ordered that 10,000 pikes were manufactured in Moscow and some ready pikes were to be taken from stores in Narva and Dorpat.[14] Probably the following document reflected implementation of the above: in September 1706 9,000 pikes (and 7,500 *berdysh*!) were produced and sent to regiments in Kiev, Smolensk, Bryansk, and Pskov;[15] there is no further information about which units received them and in what numbers, but supposedly it went to some garrison troops

13 P.O. Bobrovskii, *Istoriia 13-go leib-grenaderskogo Erivanskogo polka za 250 let 1642 1898* (SPb, 1892), T. 1, Appendix 2, p. 29.

14 *Pisma i bumagi*, T. 4, pp. 504–505.

15 *Severnaia voina. Dokumenty 1705–1708*, p. 212.

or armed people in anticipation of a Swedish invasion, because there is no known evidence of pikes in the field army in 1706–1707.

The Tsar first mentioned pikemen in his correspondence on 3 February 1707 when he wrote to Repnin and Sheremetev:

> Having received this, you should establish in infantry one eighth of soldiers with pikes, and for this order to procure staves of dry pine or fir tree, long and with thicker end in hands; the iron points for the staves to be taken from the *chevaux de frise* – the side which is close to yourself or to the camp; it would also be good if commanders found pikes for themselves.[16]

This was confirmed and specified the next year in 'The Establishment for combat as of today' issued in March 1708. It said that pikemen were to be every second soldier in the front rank, which in the four rank formation gave exactly one eighth proportion. Regiments of the field army all received pikes, either manufactured locally or captured such as in the Troitsky Regiment, which had 125 Swedish pikes in 1709, after Poltava most likely. Pikemen were converted fusiliers, and their muskets and cartridge boxes remained in regimental stock. Issue of 144 pikes and pistols was typical for a 1,200-strong eight company and two battalion regiment.

Early in 1711, when the army prepared for the Turkish campaign, all pikes were cut in two and used as *chevaux-de-frise* – the presumption being that the pike was good for field battles against European troops, but against Asiatic horse and irregulars it was preferable to have more firepower covered with *chevaux-de-frise*. Reissue of pikes to the Petrine infantry after the Pruth campaign became a lengthy process. No less than 12 regiments received their pikes back in 1712, two in 1713 and one in 1714. Of them eight regiments received not the standard 144 pikes but 400, which gave a far larger share of pikemen (if all issued pikes were actually carried). The Guards Division, and the Divisions of Repnin and Weide (total 17 units) obtained pikes for every eighth musketeer in 1715 – a new pattern of triangular blades was manufactured in Tula for them. At least two regiments reported in 1723 that they never had this type of weapon. The pikes and pistols were surplus armament and muskets were still issued according to the full strength of a regiment; in 1723 Tsar Peter confirmed that when another war with the Turks started, pikemen were to give up their pikes and pistols and to pick up their muskets and bayonets. Grenadier companies and regiments did not have pikes.

Pennants were a feature of pre-1700 pikes, for example the pikes of *streltsy* in 1696 or among the 1703 Salaty trophies; *vybornye* probably carried them too, because many pikes with pennants were recorded in the stores of the St. Petersburg Armoury and in the Preobrazhensky Guards. However, the pikes issued to the infantry in the Great Northern War period were never mentioned in the sources together with pennants, so we may assume that Viskovatov was incorrect when showing a post-1700 Preobrazhensky pikeman with a pennant.

16 *Ibid.*, p. 168.

Pistols

Since it was considered important that the firepower of a battalion was not lessened with the introduction of pike, pikemen were given pistols. On 16 August 1708 the Tsar's instruction to Sheremetev prescribed that pikemen in three infantry divisions (Sheremetev, Repnin, Hallart) received pistols, 18 per company, which made one eighth in a 144 strong company. For this purpose they took 2,000 pistols that were in stock in the Preobrazhensky Guards (probably prepared for their horse service), and the remaining 1,600 pieces were to be brought from Smolensk; where pistols were not available, they converted carbines by cutting off butts and barrels, and by attaching hooks.[17] The latter were probably for carrying on the waist belt: Danish envoy Just Juel observed in 1709 that Russian pikemen in Narva had their pistols on the belt. In some regimental records pistols are shown together with some sort of sling, probably for carrying over the shoulder. On the eve of the decisive clash near Poltava a daily order to the army on 13 June 1709 made sure that all pikemen had pistols and pistol cartridges were ready.[18] Although the men now carried pike, pistol, and cartridge pouch for pistol ammunition, their muskets and cartridge boxes remained in regimental stock. When in 1711 pikes were abandoned and pikemen received back their muskets and cartridge boxes, their pistols were given away to NCOs in order to increase the firepower of a line.

Halberds, Partizans, Half-pikes, *Berdysh*

Officers and NCOs in the Russian infantry carried polearms both before Peter, and when the war started. While weapons (and everything else) were issued to soldiers and NCOs and we can find these items in regimental records, officers' weapons as a rule were not issued by the government, so we have almost no data as to what type of arms they carried during the war; most likely it was half-pikes. A partizan – a short spear with a broad flat blade, often with a half-moon in the lower part – was introduced for officers in 1719. Blades of surviving items bear the double eagle, St. Andrew's cross, a crown, and military trophies. A massive tassel of silk threads was attached under the blade and the colour of thread indicated the rank of the owner.

A 12 company infantry regiment in 1700 had 24 halberds and 36 half-pikes that were distributed among under-ensigns, sergeants and captains-of-arms. In 1704 halberds were the issued polearms for sergeants and Captains-of-arms; in a few regiments such as Ryazansky and Moskovsky captains-of-arms had partizans. Corporals initially had muskets; in 1707 the Tsar ordered the giving of 1,704 half-pikes to corporals of all regiments; regimental records show that in the 1710s they received halberds or half-pikes. In 1719 three types of halberds were affirmed: for sergeants a straight axe blade, for captains-of-arms a semicircular ingoing blade, and for corporals a semicircular outgoing blade. These were manufactured and sent into regiments only in 1721.[19] It is hard to tell what exactly type of blades were used before this regulation, but the excavated halberd blade from 1700

17 *Pisma i bumagi*, T. 8, Vol. 1. p. 62

18 *Arkhiv kniazia F.A. Kurakina*, T. 3, (1892). pp.114–115.

19 V. Egorov, 'Protazany i alebardy russkoi pekhoty 1719–1730' in *Tseikhgauz*, 3, 1994.

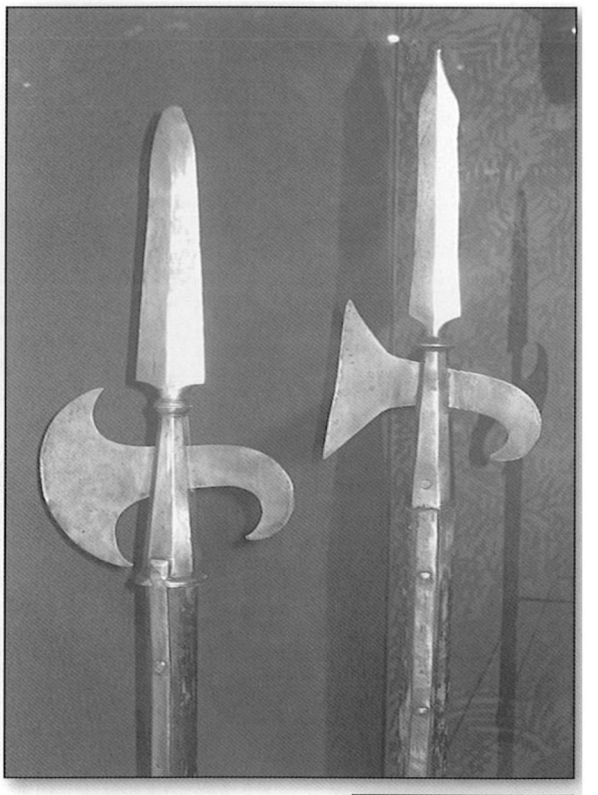
has an ingoing edge. A number of surviving richly decorated halberds in the museums and referred to as Guards sergeants' halberds must have been some sort of ceremonial weapons stored in Preobrazhenskoye.

Grenadiers traditionally did not carry polearms, but in several grenadier companies NCOs had halberds before 1709.

The *berdysh* (sometimes spelled *bardische*) is the iconic weapon of the 17th century *streltsy*, however mass introduction of *berdysh* occurred as late as 1656. Many secondary drawings show *berdysh* as musket rests, however modern scholars have not found any evidence of such use. When on march a *berdysh* was worn on a sling over the shoulder; when in a firing position, men simply tucked the lower end into the ground.

Streltsy regiments in 1696 went to the second Azov campaign with muskets and pikes only, they did not have swords or sabres at all, and *berdysh* were only issued to regimental cannoniers, eight per regiment. In the 1700s *streltsy* units participating in operations against the Swedes had fusils and *berdysh*. The regiment of Lieutenant-Colonel Shenshin, ex-Moscow *streltsy*, transferred to the southern frontier as garrison in Fort Novobogoroditsk and served with fusils, swords and cartridge boxes, with no *berdysh*.

Berdysh were also issued in limited quantities to infantry regiments after the disastrous 1700 campaign when they desperately wanted at least some cold steel. In 1706 7,500 new berdysh were manufactured and sent to troops, however there is no data as to whether field infantry ever received those axes or brought them onto the field.

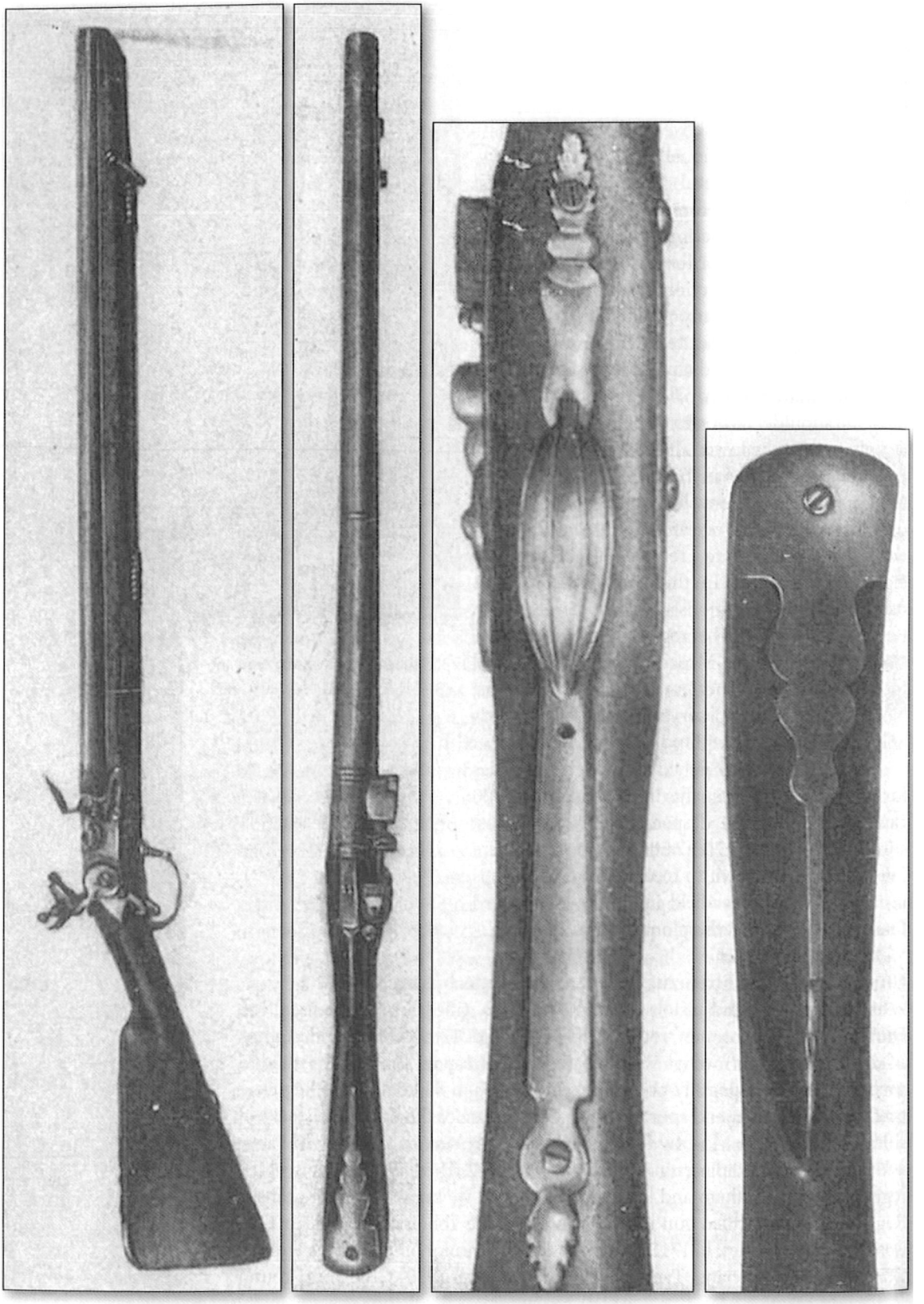


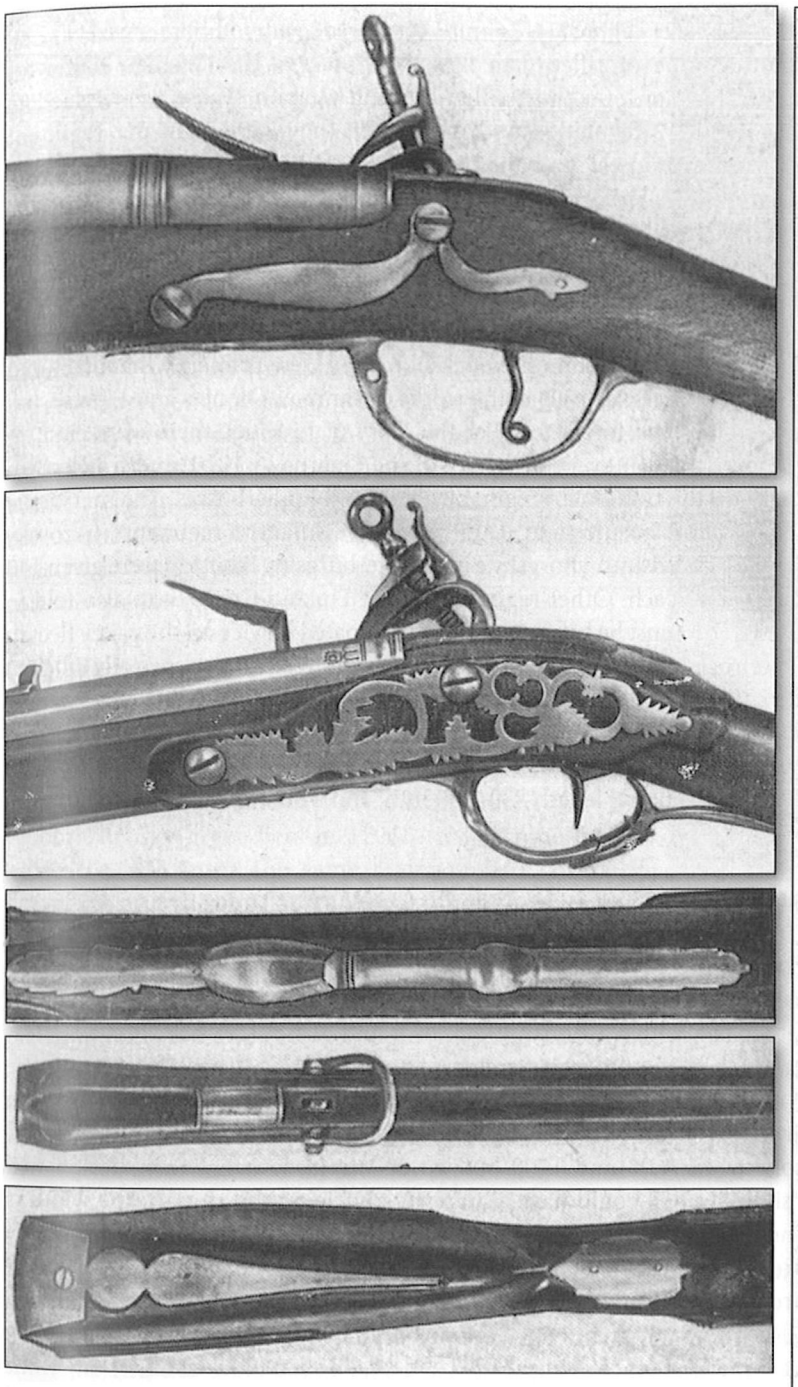
36. Halberds, corporal and sergeant models, 1719. Exhibited in the State History Museum, Poltava 300th anniversary exhibition. (Author's photo)

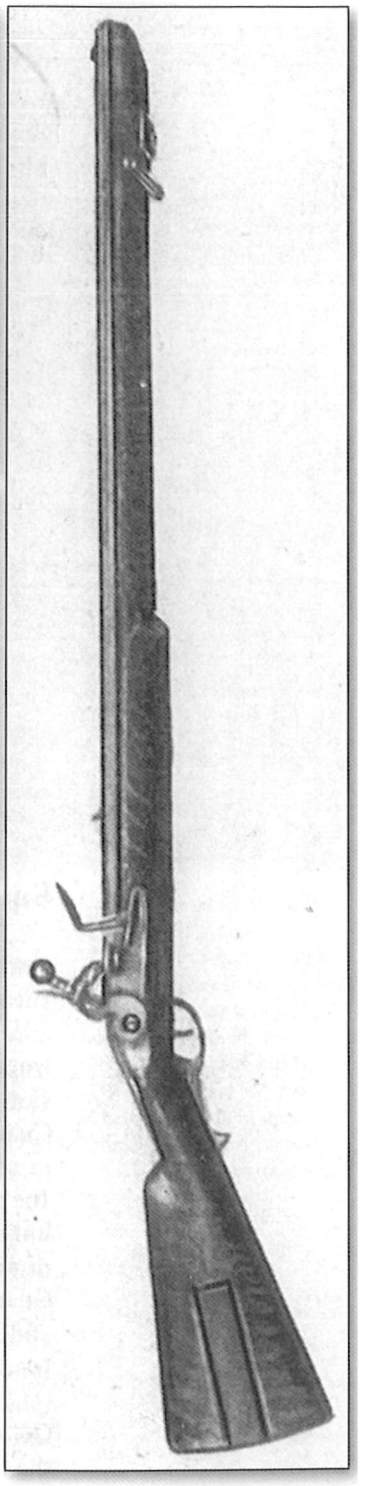
37. Officer's partizan. Artillery Museum, St. Petersburg. (Author's photo)

Unusual Infantry Firearms: Rifles and Blunderbusses

While all muskets and pistols were smooth bore, rifled arms were used, too. During pre-Petrine times, roughly after the mid 17th century, rifled guns (*vintovalnaya pischal*) were a widespread officer's weapon, sometimes issued to *streltsy*, and were especially popular among troops in Siberia where they were used both as combat and sporting guns. By the start of the war some stocks of rifles were stored in Moscow from where they were sent to the army in Pskov and Novgorod – 290 pieces in 1701 and 230 in 1702. There is no data on which regiments received them and in what quantity, but we know that the Kazansky Regiment lost one rifled gun in action in 1704. The Tobolsky Infantry in 1706 was to receive 40 rifles. In 1715 rifles were issued to junior officers of the Finland Corps and to musicians. Typically, rifles had a long (950–1,100 mm) round







38. (Facing page and top left this page): Blunderbuss, 1709.

39. (This page): Stutzer, 1720.

From L.K. Makovskaia, ***Small Arms of the Russian Army in the Late 14th–18th centuries*** (1992). Courtesy of Artillery Museum, St. Petersburg.

barrel and smaller calibre (14–16 mm) compared to smoothbore muskets.

Another type of rifled arm was the *stutzer* – the German name for a Western version of a short rifled hunting weapon. These were issued to oboists per 1712 regulation and most often they were eight per regiment. Sometimes drummers had them too. In several regimental records (e.g. Azovsky in 1707, Vyborgsky in 1709, Narvsky in 1706) one finds between 30 and 50 *stutzers* which means they were issued to chosen soldiers as well. The 1720 model manufactured in Tula had a 755 mm octagonal barrel with eight riflings, a 15 mm bore and overall length of 1,200 mm.[20]

The *mushketon* or blunderbuss with its short and broad barrel – sometimes with a funnel – was used to fire buckshot. They were primarily manufactured for the navy as early as 1703 at the works of Tambov, Olonets and Lipetsk, but were used for land forces too. Per the diary of Just Juel, there were eight to 10 blunderbusses in every company of the Guards in 1710, and it is known that in 1714 the two Guard regiments had 504 blunderbusses. The mass issue of this weapon occurred in 1712 when five infantry regiments (Azovsky, Arkhangelogorodsky, Vyborgsky, Sankt-Peterburgsky, Troitsky) were given 140 blunderbusses each. Other regiments of the Finland Corps were also told to receive it. This must be because of their anticipated service on the galley fleet in Finland from 1713 onwards, where this type of firearm was especially efficient for naval fights and *abordage*; buckshot in Finnish woodland supposedly was effective, too. The surviving 1709 blunderbuss has a round barrel with a conical chamber and a small funnel at the muzzle; it has iron fittings, an overall length of 1,270 mm, a barrel length 830–840 mm, and a bore of 25–29 mm.[21]

Equipment

Cartridge Boxes

These were the main piece of equipment for a musketeer, and consisted of a leather bag with a wooden block in it and a shoulder belt. It is not clear where Viskovatov took his version of cartridge box decoration from – the vast majority of sources never mention any decorations on a box lid. The Guards, Preobrazhensky at least, do have emblem decorations mentioned in sources in 1698 and 1708 but we do not know what their design was. The shoulder belt could have a butterfly buckle on the aft part, the width is unknown except that it was said musketeers' belts were narrower than those of grenadiers. When Prince Boris Kurakin, an officer in the Semenovsky Guards, visited Prussia in 1705 he noted several differences between Prussian and Russian equipment, viz. Germans did not put shoulder belts under the waist belt and their cartridge boxes had no wooden block at all.

What were perceptions of soldiers' comfort? In a letter from General Golovin to the Tsar discussing the introduction of new boxes for guards in 1698, the former wrote that in his opinion a waist belt for a cartridge box with an

20 L.K. Makovskaia, *Ruchnoe ognestrelnoe oruzhie* (1992), pp. 71, 73, 74, 182.
21 *Ibid.*, pp. 58–59, 169.

additional shoulder sling would have been more convenient compared to a single shoulder belt. He also thought that the all leather boxes such as the one Peter sent him from Europe was susceptible to wet and less fit for long service, unlike a wooden block. The block had 24 holes and four or six holes could be united to insert a tin oiler. Other items stored in the cartridge box or its side pocket were spare flints, jaw pads, worm, scrapper, and a screwdriver.

Pouches

Most often pouches (*lyadunka*) were belly boxes worn by grenadiers and pikemen with eight to twelve holes drilled in the wooden block to place cartridges. Because calibres varied there were varying types of pouches – for muskets, for pistols, and for blunderbusses. The same name, *lyadunka*, applied to dragoon shoulder equipment which was basically as large as the infantry cartridge box considering the quantity of cartridges it fitted.

Grenade Bags

The bag fitted normally two or three hand grenades. It had some sort of iron frame and rings, and the leather shoulder belt had hooks on ends. The only known measurement is that for the shoulder belt manufactured for the Preobrazhensky grenadiers in 1706 – it was nine inches broad, i.e. 228 mm. The same regiment had covers of beaver fur over the box flap, to keep it dry in the rain. The Tobolsky Infantry in 1706 were to receive grenadier bags and pouches with seal fur covers.

The shoulder belt had a match case on the fore part – brass most often, although records show cases made of tin too. It served to hold the glowing match which was required to ignite grenade fuse; the case had a perforation to allow air in and a wooden cork on top to fix the match. The excavated Russian match case lost on Finland's shore in Autumn 1714 has a sort of comb on a hinge – it also fixed the match inside. Lacy Grenadiers in 1712 dispensed with their match cases and used the metal to repair their sword scabbards.

40. A musketeer, from an early 1720s bas-relief by Rastrelli (Narva captured in 1704). It clearly shows infantry equipment: a cartridge box on a broad shoulder belt with buckle and waist sword belt. The purpose of the narrow belt over the right shoulder remains unknown; perhaps it holds a water flask. (Author's photo)

Kaptenarmus Bags

The second senior NCO in a company – the Captain-of-Arms, or *Kaptenarmus* – was responsible for supply of ammunition. For this purpose he not only had a company cartridge cart but he also carried two bags on him. Records show the two items known as bullet bag and powder bag, and on several occasions (such as the assaults on Dorpat and Narva in 1704) the powder bags exploded during combat. The use of loose powder at a time when paper cartridges were already in full use is yet to be explained.

Waist Belts

Military fashion prescribed that cold steel was no longer worn on shoulder belts as it was in 1670s, so waist belts came in use. When used solely for

41. Water bottle circa mid-18th century, Gotlands Försvarsmuseum. The brass eagles were attached to the flasks in the 1750s. This makes this item the earliest known surviving Russian flask. (Photo by Monika Borgman, Gotlands Försvarsmuseum)

a bayonet it was called a bayonet waist belt, and for swords it was called a *portupeya* (from French *porte-epee*). Buckles were both butterfly-shape and D-shape and had a hook by which the buckle was attached to the belt. The bayonet frog as shown on period European illustrations was often separate from the sword frog and vertical but since bayonets were long it was more convenient to place them along with the sword scabbard.

Powder Horns

The procedure of loading a musket required that the pan was primed before the paper cartridge was bitten, i.e. some primer, powder flask or horn was necessary. The horn, however, was rarely mentioned in regimental records. The most common must have been horn with a primitive wood cork or stopper with a spring. The Pskovsky Regiment in 1712 received primers made of tin iron, the Smolensky Regiment primers of wood. Period European images indicate that it hung on a sling from the waist belt or from the cartridge box shoulder belt.

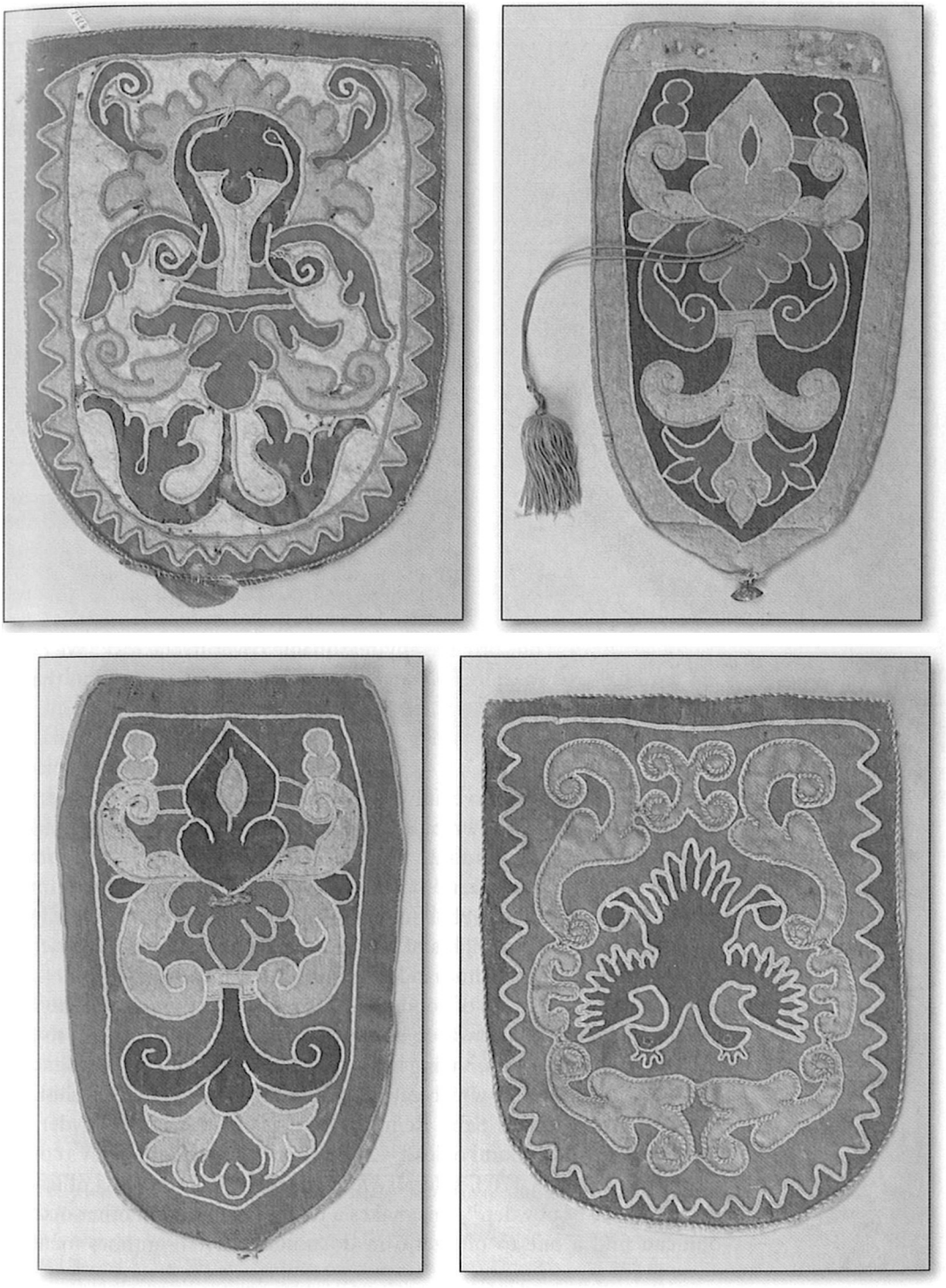
Haversacks and Water Flasks

A *ranets* (from German *rantzel*) or proviant bag was made of leather and had one sling with a buckle, so it was carried over the shoulder. The construction and measurements of it are unknown. It must be noted that to our knowledge it was not usual for soldiers to march in full pack then, the accompanying carts were to transport most of the load. On at least three occasions generals mentioned soldiers carrying their bags as something extraordinary – troops marched in haste, had to leave their train behind and hence men had to carry the bread in their bags (Sheremetev in Astrakhan in 1706, Kurakin in Polotsk in 1705, Apraksin in Narva in 1704). Over time it probably became more common practice. General Hallart in 1706 commented on the deficiencies of the supply system and noted that soldiers had to carry bread on them and threw it away out of exhaustion.

The water bottle – *manerka* – made of tin or sometimes of brass, was worn on a shoulder belt with a buckle. Its shape and volume is only known per items of the late 18th century.

Weapon Covers

Soldiers had to keep their firearms dry and clean. Leather lock covers (*polunagalische*) were issued to the foot; dragoons had full covers (*nagalische*) that fitted the whole musket. Regimental records show them issued both in the 1700s and in the 1710s. In 1706 the Tsar refused an issue of lock covers to a dragoon unit in Sheremetev's army, writing that 'they can make wraps around locks on their own'. The Army Museum in Stockholm has a vast collection of ornamented cloth items described as Russian lock covers, overall 191 pieces. However it is hard to see how those items could have been



42. Russian lock covers, captured at Salaty, 1703. Courtesy of Army Museum, Stockholm. These pieces – hundreds in total, taken in the train of ex-Moscow ***streltsy*** – may represent luxury accessories of those old elite foot; something that was not used by regular infantry.

43–44. Members of the reenactment group "Preobrazhensky Life Guard Regiment, 1709" in full pack on 24 hour tactical manoeuvres. in Marma, Sweden. (Author's photos)

useful, as they do not provide any reasonable cover to the lock. We can tell for certain that these items belonged to *streltsy* and were stored in the train where the Swedes captured them in 1703.

Ammunition

As it was difficult to observe universal calibre throughout all regiments, every regiment was issued its own bullet moulds, cast iron pot to melt the lead and skimmers to pour the lead into the mould. Moulds were bronze or iron and held six, 12, 20, 24 or even 50 bullets. Per a regulation of 1720 an infantry regiment had four musket ball moulds and four buckshot moulds.

The proportion of weights of powder and lead in a cartridge varied. The notorious Imperialist commander and author Montecuccoli (1609–1680) wrote that if powder was of good quality it was to be taken at half the weight of the lead; poor powder was to be two thirds of the lead weight; at the same time he wrote that Turks, having high quality barrels, loaded a powder charge equal to the lead weight which gave far more powerful and distant shot.[22] The French artillery author Saint Remy wrote that one pound of powder made 24 rounds and one pound of lead – 24 bullets.[23] When Sheremetev's corps set out to campaign in 1703, soldiers were issued with six pounds of lead and three pounds of powder.[24] This makes a two to one ratio; in other occasions one can find a one to one ratio in documents. Often authors mention a

22 *Memoires de Montecuculi, generalissime des troupes de l'Empereur*, T. 1, (Amsterdam, 1746), p. 62.

23 S. de Saint Remy, *Memoires D'Artillerie* (Haye, 1741), T. 2, p. 253.

24 B.P. Sheremetev, 'Voenno-pokhodnyi zhurnal s 3 iiunia 1701-go goda po 12 sentiabria 1705-go goda general-feldmarshala Borisa Petrovicha Sheremeteva' [Military campaign journal of General Field Marshall Boris Petrovich Sheremetev from 3 June 1701 to 12 September 1705] in

powder charge of 13 g and lead ball of 34 g.[25] In the Smolensky Infantry in 1719 one pound of gunpowder made 18 musket or 36 pistol rounds.

A new method of rolling cartridges was proposed by Field Marshal Ogilvy in November 1705: soldiers were to be issued paper, thread and lead to remake cartridges according to the 'new invention' when on winter quarters.[26] The 1727 memorial issued by the Ordnance (*Glavnaya artilleriya*) read that by then they had been issuing bullets with tails to the army.[27] The tail was in fact the uncut sprue from the bullet mould and was used to attach the bullet to the cartridge. Archeology confirmes this feature. The systematic excavation on the battle site at Stacket, Sweden (1719) revealed that Russian bullets almost universally had an uncut 'tail', while Swedish bullets were cut round.[28] The tailed bullets are also found in other locations such as Narva in 1700, but without a professional archeological approach it is impossible to tell which side they belonged to.

44

Buckshot was introduced in September 1707. Following the Tsar's decree, Field Marshal Sheremetev ordered that 50 buckshot cartridges were prepared for every soldier on top of the 50 cartridges with ball that were already in place.[29] It was widespread and probably rather efficient ammunition. For example, the Astrakhansky regiment in the Battle of Senzhary near Poltava on 14 June 1709 fired 20 balls and as many buckshot per each of 920 soldiers.[30] The Rostovsky Regiment during the siege of Stettin spent 3,615 ball and 1,400 buckshot rounds.[31]

A peculiar note: in 1705 after defeating the Swedish descent on Kotlin, the Russians picked up 400 to 500 trophy muskets that were loaded with 'a bullet cut in four parts with inserted horse hair and with four smaller bullets

Materialy voenno-uchenogo arkhiva glavnogo shtaba [Materials of Military Registration archive of General Staff]. T. 1. (SPb, 1871), p. 126.

25 E.V. Myshkovskii, Ruchnoe ognestrelnoe oruzhie (1959), p. 60.

26 *Pisma i bumagi*, T. 3, p. 501.

27 *Nash vosemnadtsatyi vek. Voennyi sbornik* [Our 18th century. Military Collection], (Moscow, 2014), p. 154.

28 T. Englund, *Baggensstäket, 1719 – Triumferade verkligen svenskarna i slaget? Och var ryssarnas egentliga syfte att inta huvudstaden?* (Stockholm: HAMN, 2015), p. 35.

29 *Sbornik IRIO*, T. 25, pp. 76–77.

30 *Trudy IRVIO*, T. 3, p. 205.

31 N.N. Popov, *Istoriia 2-go grenaderskogo Rostovskogo polka* (Moscow, 1902), T. 1, p. 171.

on top of it.'[32] This type of projectile had been probably unheard of by the Russian command, hence they mentioned it in the after-action report.

The cartridges in stock were distributed; for example in 1707 in the Preobrazhensky Regiment 20 rounds with ball were to be carried by the soldiers in pouches and 30 more rounds were to be transported in ammunition carts.[33] In 1715 every soldier or dragoon was allocated 50 musket cartridges – 30 with ball and 20 with ball and buckshot. Of these 50 cartridges, 24 were in individual cartridge boxes and the remaining rounds were stored in the company ammunition cart. Those who had pistols – dragoons, pikemen and NCOs – had 12 rounds in their pouch and eight more in the cart. In addition the Ordnance had to store 70 more musket and 20 pistol rounds per man. Sheremetev proposed that individual regiments sent their sample bullets to the Ordnance, so that the latter could cast bullets of the required calibre upon request and regiments could drop their heavy melting pots in order to lighten the train.[34]

Hand grenades were typically 2 lb and 3 lb calibre, a cast iron hollow sphere filled with black powder. The fuse was a wooden tube filled with a burning composition and inserted into the grenade's touch hole; its outside end was wrapped with oiled paper, so the grenadier had to tear it off with his teeth before igniting the fuse. Slow match was the expendable necessary to grenadiers; in July 1708 Repnin's Grenadier regiment received four grenades and two fathoms (4.2 metres) of slow match per one man.[35]

Horse Equipment

Saddles were of the native Russian type – it had Oriental origins and was more fit for light cavalry. During reforms Peter decided he wanted a new European type of saddle fit for heavy cavalry. In the end his cavalry ended up with both types. In front the saddle had two holsters for pistols; in the rear, saddlebags. Shabraques were plain leather as a rule. Saddlecloths were not regulated and we find very few mentions of their colour or decoration. For example, the Sibirsky Dragoons in 1704 had dark green shabraques, Kargopolsky in 1707 had green shabraques and holster covers, the latter decorated with a fringe. The Moskovsky Dragoons in the same year had red shabraques in the grenadier company. The Leib-Regiment had blue ones to match the colour of their coats. When the Preobrazhensky Guards became mounted in 1707, they received saddlecloths made of yellow and red wool and some plain cords. After 1710 when coloured cloth costed dear, they stopped issuing coloured saddlecloths.

32 *Materialy dlia istorii russkogo flota (MIRF)* [Materials for the history of the Russian navy]. TT. 1–4. (SPb, 1865), Vol. 1, p. 76.

33 *Severnaia voina. Dokumenty 1705–1708*, p. 86.

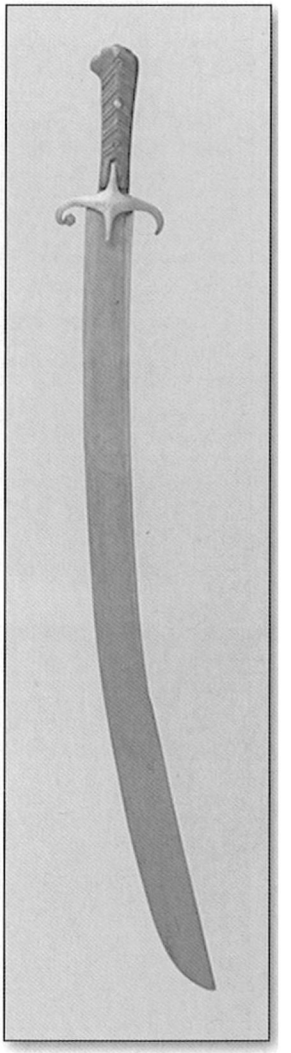
34 V.I. Egorov, *Proekt o dolzhnosti glavnoi artillerii 1723* (2013) <https://yadi.sk/i/MGrw3bKMc7NHt> (accessed 5 April 2017), p. 9.

35 Archive of General Feldzeugmeister Jakob Bruce (2006), T. 4, p. 143.

Cavalry Weapons

Sabres

Despite typical European cavalry being armed with straight blades, the first Petrine dragoons had curved sabres. The first two dragoon regiments raised in 1698 and in 1700, and later known as Kievsky and Moskovsky, in 1700 received sabres with iron hilts.[36] The Troitsky Dragoon Regiment when it was raised in 1701 was given 953 'sabres and cutlasses'. Dragoon NCOs in regiments raised in 1701 had cutlasses ('*tesak*'). In late 1702 Field Marshall Boris Sheremetev wrote that his dragoon regiments wanted 5,500 sabres, however, judging by regimental records, from 1701 onwards dragoons seem to had had mainly straight blades. Although we know nearly nothing about the armament of light horse and irregulars, we may assume that the sabre was popular among them, at least among those who could afford it.



45. Sabre captured at the battle of Narva, 1700. Polish-style karabela, taken by Swedish Count Stenbock from Tsarist Commander-in-Chief Duke de Croy. Livrustkammaren [Royal Armoury], Stockholm.

Swords

The most popular cold steel among dragoon regiments in the early 1700s was swords ('*shpaga*'), however later, roughly after 1705, broadswords dominated. The latter ('*palash*') had a broader blade that often had one or two cutting edges and a rounded point i.e. it was mainly a cutting weapon. Surviving items have a blade width over 40 mm, some have a sabre-type grip and some a basket hilt. Regimental records mention both brass and iron hilts. Foreign merchants imported both complete swords and blades with scabbards without hilts, and today many blades bear 'Solingen' marks and various slogans in Latin, Dutch, or German (e.g. 'Gloria Petri').[37] The scabbard was made of wood covered with leather, it had a metal point and mouth with a hook. The sword was worn on a standard waist belt, however sabres and broadswords could have been worn on a sabre-type waist belt with two slings; at least one surviving period broadsword has two rings on the scabbard.

Fusils

Dragoons had their own pattern of fusil that was as a rule shorter than that of soldiers, and of course it had an iron sling bar and ring on the left side which allowed trooper to hang his firearm on a bandolier (this broad belt was worn over the left shoulder and had an iron hook on the horseman's right hip). Bayonets were introduced in dragoon regiments in 1712 but prior to that dragoon grenadier companies and horse grenadier regiments already had bayonets. The model of fusil established for dragoons by the 1715 decree had same .78 calibre and generally was of similar design to the 1715 infantry pattern, albeit it was shorter – a 1,000 mm barrel and 1,350 mm overall.

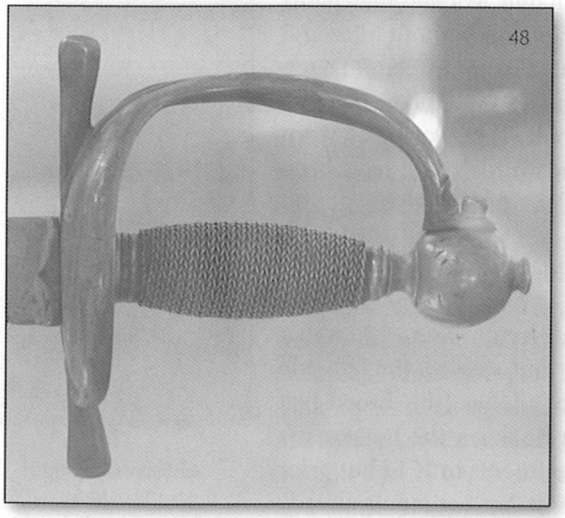
36 P.O. Bobrovskii, *Istoriia leib-gvardii Preobrazhenskogo polka* [History of the Preobrazhensky Life Guard Regiment]. (Moscow, 2007), Appendix 1, p. 85.

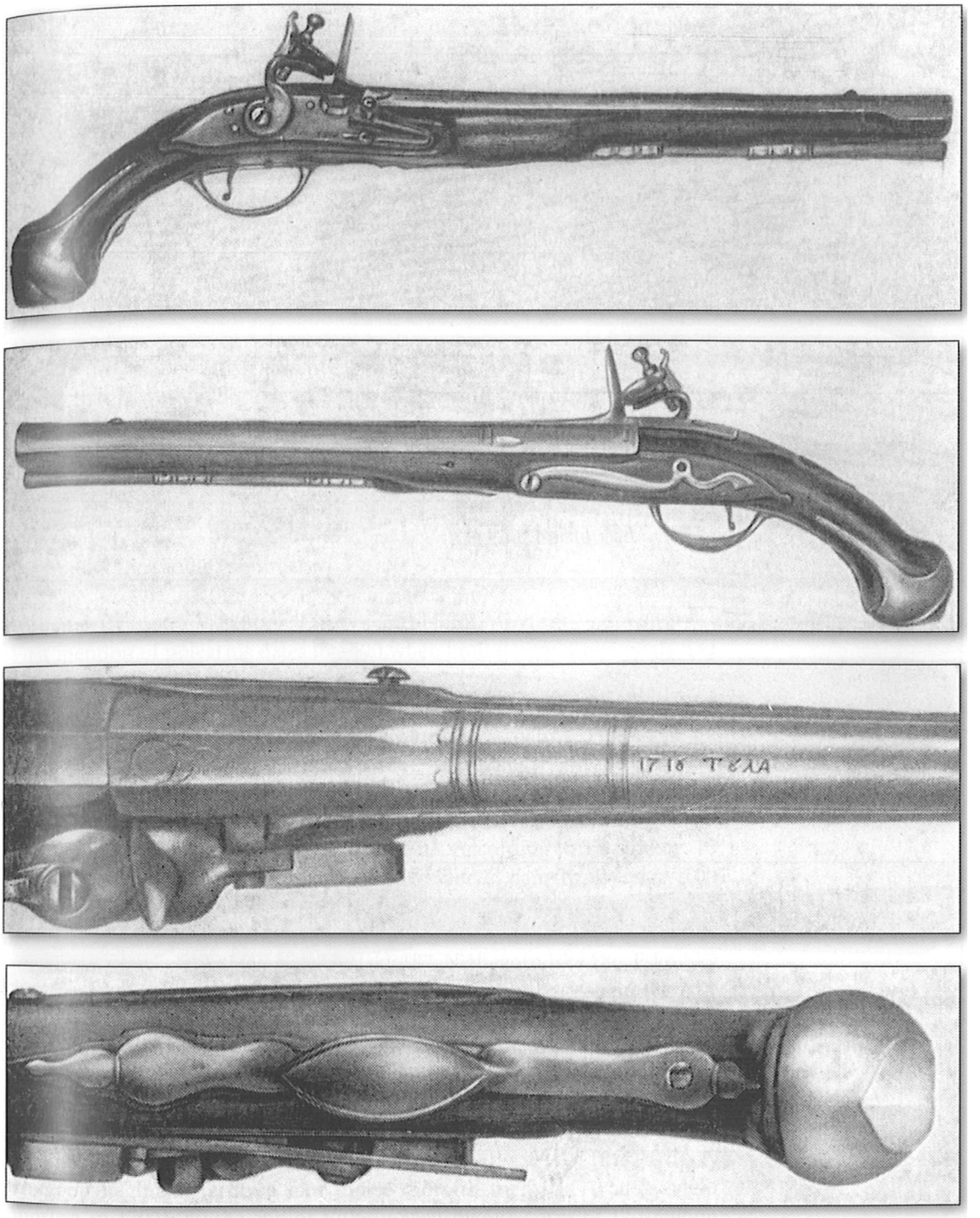
37 D.B. Antonov, 'Oruzheinye nakhodki vremen Severnoi voiny' [Weapons finds from the Northern War period] in *Sovmestnyi vypusk Voenno-istoricheskogo zhurnala i zhurnala Staryi Tseikhgauz, posviashchennyi 300-letnemu iubileiu Poltavskogo srazheniia* [combined issue of Military-Historical Magazine and Staryi Zeughaus Magazine, dedicated to the 300th anniversary of the Battle of Poltava], 2009, pp. 64–70.

46–47. Markings on broadsword blades of Olonets production.

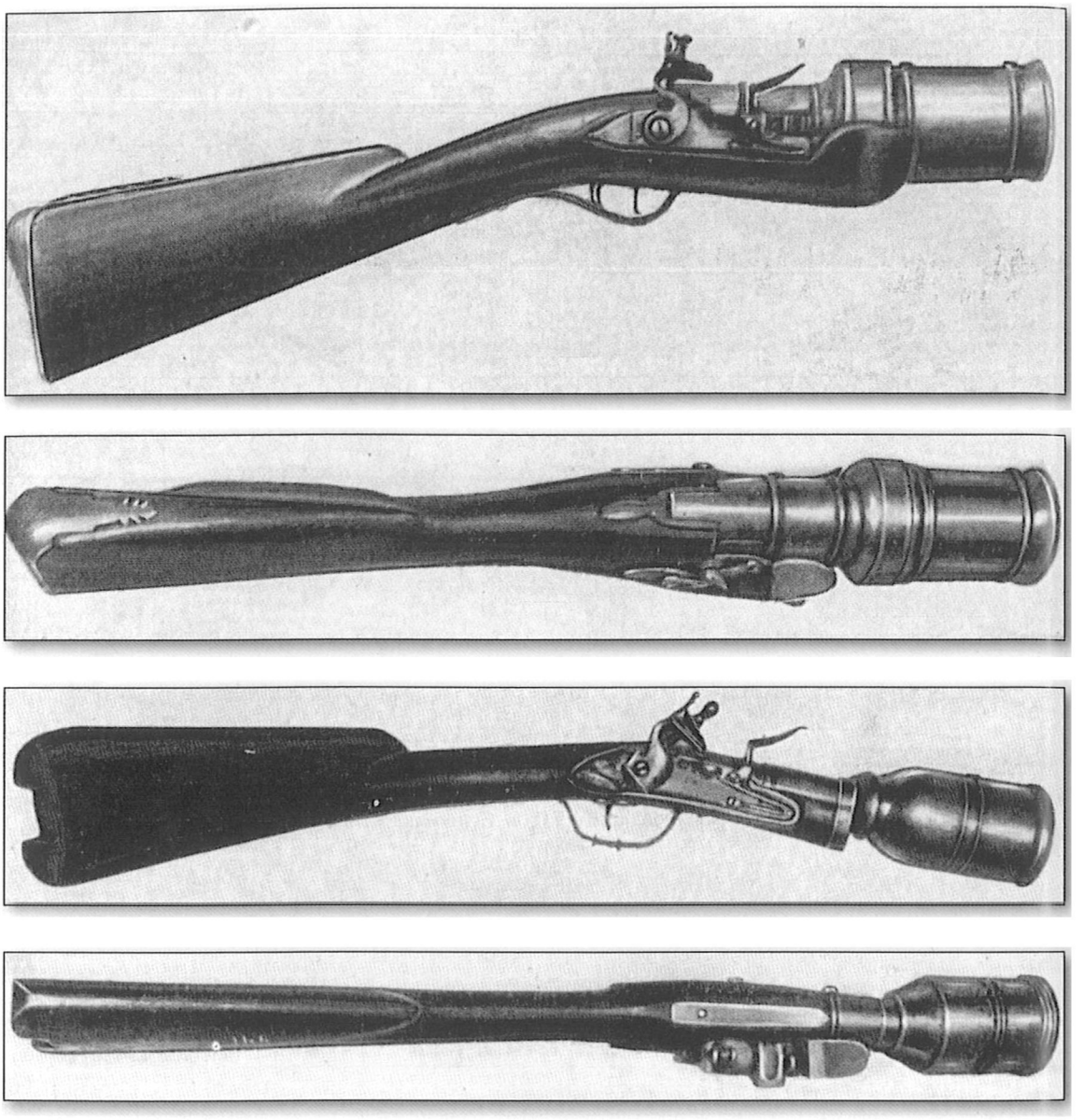
48. Hilt of a cavalry sword, 1720s. Tula Arms Museum. (Author's photo)

49. Hilt of a broadsword. Poltava Museum. (Photo by Sergey Shamenkov)





50. Dragoon pistol, 1715 model. From L.K. Makovskaia, ***Small Arms of the Russian Army in the Late 14th–18th centuries*** (1992). Courtesy of Artillery Museum, St. Petersburg.



51. Hand mortars. From L.K. Makovskaia, ***Small Arms of the Russian Army in the Late 14th–18th centuries*** (1992). Courtesy of Artillery Museum, St. Petersburg.

Carbines were another type of period cavalry firearm, but had rather limited use in dragoon regiments – one finds them in five regiments in numbers from 6 to 71, and only the Olonetsky Dragoons were issued as many as 142 carbines in 1707.

Pistols

Pistols were manufactured in Russian works in the early 1700s however in limited numbers, from 300 to 500 pairs a year. They had a barrel 360 mm long, a bore of 15–16 mm and weighed 1.5 kg. Import was far larger, and between 1706 and 1708 alone it brought in more than 15,000 pistols. Home production increased after 1711 and by 1715 foreign purchases stopped. The exemplary 'Berlin' pistol was sent to Tula where they made it lighter by making the wooden stock slimmer, and it became a prototype to the 1715 model that had .68 calibre or 17.3 mm, a 360 mm long octagon to round barrel, and an overall length of 535–550 mm. Iron fittings included two ramrod pipes for the wooden ramrod, a trigger guard, a side plate and a butt cap with a massive faceted pin.

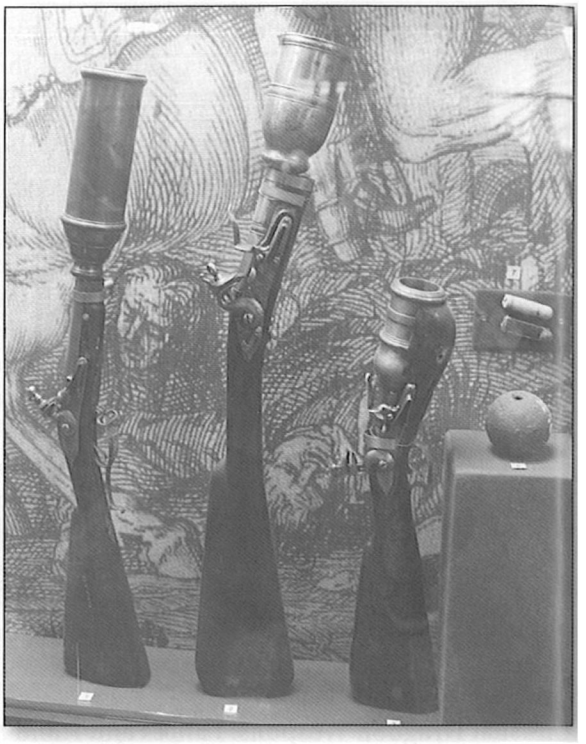
Pistols were given to dragoons in pairs, however after 1712 the dragoon's kit included only one pistol. They were carried in leather holsters attached to the front of the saddle (pommel).

Unusual Dragoon Weapons: Lances and Hand Mortars

First mention of polearms dates to 1700 when both dragoon regiments had 286 pieces each, although it is unclear whether those were infantry pikes or cavalry lances. In late 1702 Field Marshall Boris Sheremetev ordered that nine dragoon regiments in his command had a unified structure: 11 companies, of which 10 were dragoons and the eleventh – by analogy with grenadiers in a foot regiment – a company of lancers to be used for 'fast missions and the enemy's confusion'.[38] The first lancer company 96 men strong was established in the Moskovsky Dragoon Regiment in 1702. According to Tatarnikov, 10 more regiments are known to have received lances, namely: Tverskoy 100 lances in 1703, Permsky, 83 in 1704 (these were immediately transferred to Titov's infantry regiment that wanted at least some cold steel), in 1706 Astrakhansky received 100 lances, Vyatsky 187, Nizhegorodsky 186, Pskovsky 200, Tverskoy 187. In 1707 Novgorodsky received 100 lances and Sibirsky 260. No data as to the measurements of those lances nor their combat use are known. Besides lancer companies, polearms were given to dragoon NCOs in regiments raised in 1701: they had lances and halberds.

While grenadier companies were established in dragoon regiments starting in 1705 and in 1707, there were small sections of dragoons armed with hand grenade launchers – hand mortars – as early as 1701 (the Pskovsky Dragoon Regiment received four 'horse mortars' then and Troitsky eight mortars in 1702). By the end of 1706 in Menshikov's corps of 17 dragoon regiments there were 86 hand mortars, from four to 13 pieces per regiment, which indicates that there was little consistency in arming dragoons with

38 N.P. Volynskii, *Postepennoe razvitie russkoi reguliarnoi konnitsy*, T. 3, pp. 357–358.



52. Hand mortars. Artillery Museum, St. Petersburg. (Author's photo)

mortars.[39] The mortar men's kit included a special saddle (probably fitted to place the butt against it) and a grenade bag. The construction of these mortars is never described in period sources, and we assume they had a fusil-like butt with a flintlock and short broad barrel – just like many hand mortars found nowadays in museum collections. Some have an iron barrel and others brass up to 300 mm long, a bore of 72–75 mm, and overall length of the mortar with butt up to 840 mm, the butt being extra long compared to the fusil. Iron fittings included a side sling bar that was necessary for hanging the piece when mounted. Mortars were imported, for example in 1707–1708 more than 110 pieces were purchased in Warsaw, Poland.[40]

The dragoon hand mortars were probably abandoned by 1715 as Sheremetev wrote to the Tsar that mortars were used in horse regiments before (one corporalship per regiment) and they proved very harmful to the enemy. This testimony did not help reintroducing this exotic cavalry weapon, however. Nevertheless, hand mortars were probably later used in artillery and in the navy. It has to be noted that foot grenadiers did not have hand mortars – neither regimental records nor memoirs mention mortars for foot units while both types of sources do so for dragoons.

39 *Ibid.*, T. 3, pp. 476–477.

40 L.K. Makovskaia, Ruchnoe ognestrelnoe oruzhie (1992), pp. 63–65.

53. 2 pounder (67 mm) regimental cannon of ***Streltsy*** regiments, 1670s. Museum of History of Vladikavkaz. (Author's photo)

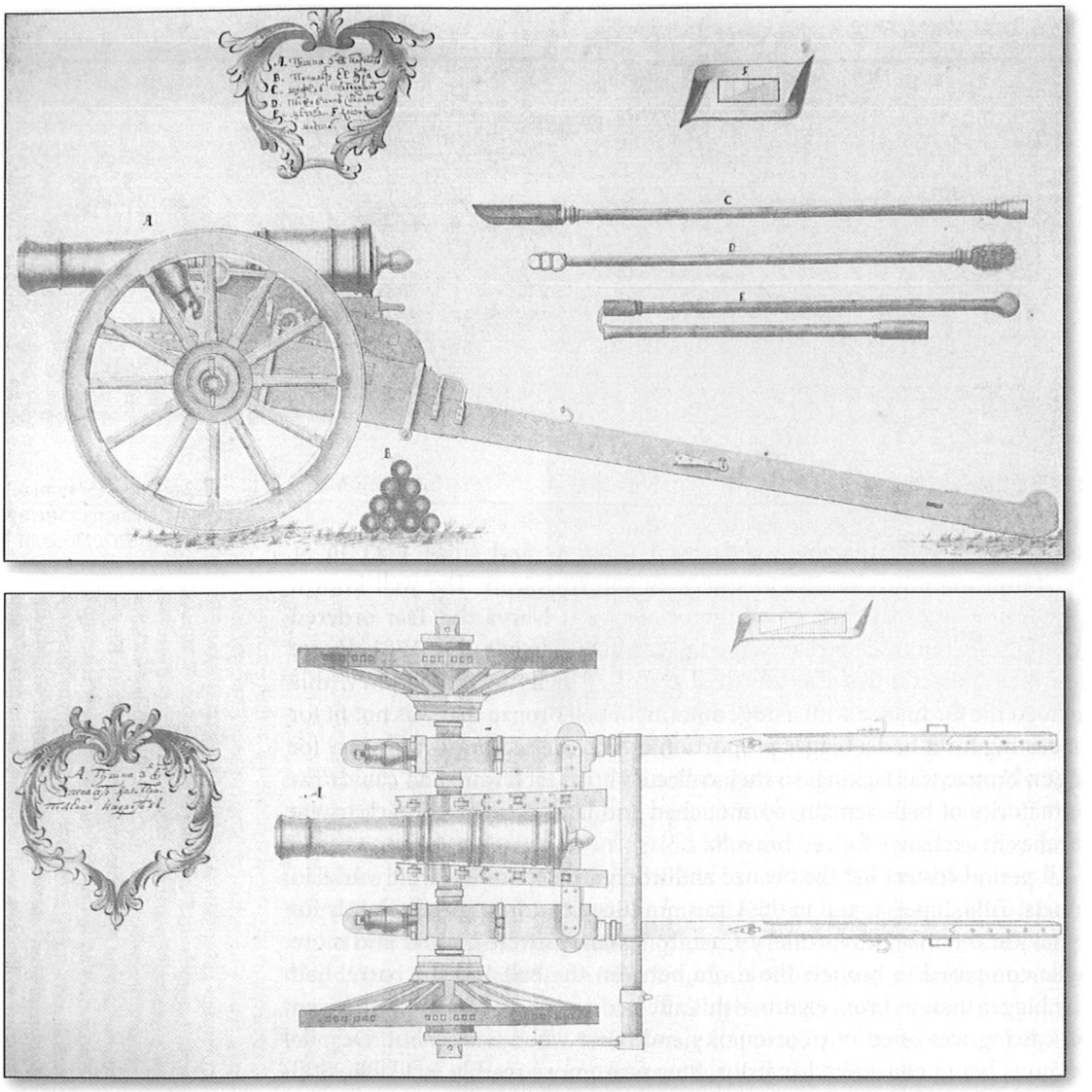
Artillery

Bronze pieces were cast in foundries in Moscow and since 1711 in St. Petersburg; some production was in Kiev and in Kazan. The well known story of how after the loss of all the ordnance at Narva the Tsar ordered collection of church bells, has some lesser known details. The 1701 decree prescribed collection of the fourth share of all bells in the country, this provided the Ordnance with a huge amount of bell bronze that was not fit for gun casting for it had a bigger proportion of tin. The red brass necessary for the gun bronze was lacking, so they collected brass tableware and cauldrons. The majority of bells remained untouched and later were given back to the churches in exchange for red brass.[41]

All period rosters list the bronze and iron guns separately. Iron works in Olonets, Tula, Lipetsk, and in the Urals produced cast iron pieces mainly for the navy and for fortress artillery. Cast iron cannons were heavier and more fragile compared to bronze; the room between the ball and the barrel had to be bigger than in bronze guns – this affected accuracy, of course. Also, an iron casting was often of poor quality and burst when being shot. Despite iron guns being considered inferior, they were more readily available. Still, through the efforts of the Ordnance the field, regimental and most of the siege artillery were equipped with bronze pieces.

Throughout the war years Russian army twice lost considerable numbers of guns. First was at the Battle of Narva in 1700 where the entire siege, field, and regimental train was captured by the Swedes. Albeit definitely a disaster, it had a positive effect as it allowed the army to get rid of old non-standardised pieces and go on with creation of new artillery nearly from scratch. In spring 1706 when the army retreated from Grodno it had to abandon the heavy train and many guns were thrown into the River Dniepr. This in turn led to

41 Iu.E. Manoilenko, 'K istorii organizatsii proizvodstva artilleriiskogo vooruzheniia v Rossii v pervoi chetverti XVIII veka' [To the history of manufacturing of artillery in Russia in the first quarter of the 18th century] in *Istoriia voennogo dela: issledovaniia i istochniki* [History of military science: research and sources], 2013, T. IV, pp. 265–291. <http://www.milhist.info/2013/08/15/manoilenko> (accessed 4 April 2017).



54. Diagrams of a 3 pounder field (i.e. not regimental) cannon with two 6 pounder mortars mounted on both sides. 1747. (Unknown officer of the Preobrazhensky Life Guard Regiment)

the introduction of a new lighter system of regimental guns. The retreat from Pruth did not involve loss of guns.

The improvement of barrel design went on during the war years. Thus after the field pieces proved excessively heavy in the Grodno campaign, Bruce introduced new models of 6 pdr (237 cm or 25 calibres long and weighing 960–1,040 kg) and 12 pdr (310 cm or 25 calibers, 1,600–1,680 kg) barrels.[42] Note that even individual pieces cast in the same design varied in weight.

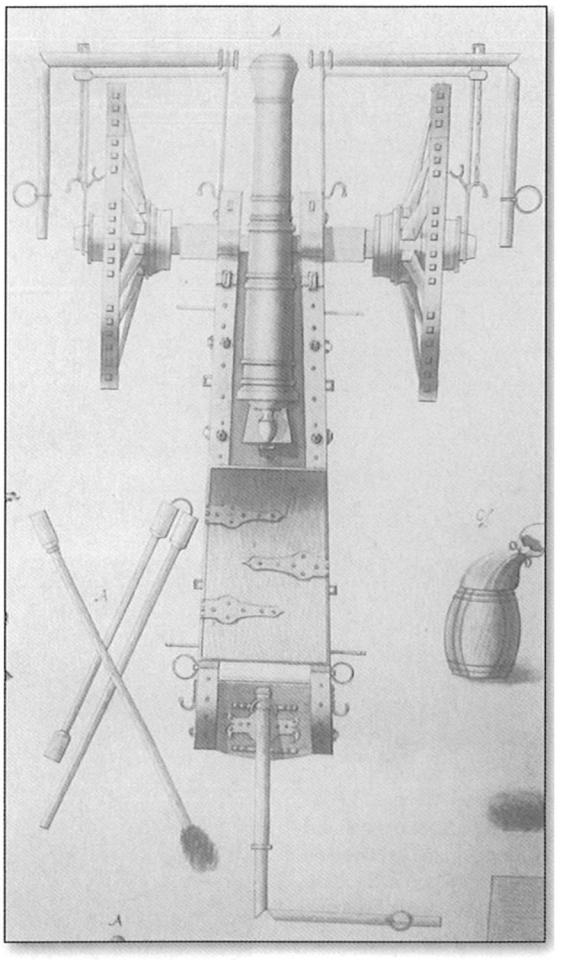
The length of a barrel and proportions of its details were based on the calibre of a gun. Calibres in the Russian artillery were based on an iron ball two inches in diameter that weighed 1.2 Russian trade pounds, this became

42 S.V. Efimov, L.K. Makovskaia, A.N. Filimon, 'Ot Grodno do Kalisha. Ia.V. Brius v 1706' in *Arkhiv general-feldtseikhmeistera Iakova Vilimovicha Briusa, T. 2. Pisma Ia.V. Briusa 1705-06* (SPb, 2005). pp. 24–25.

the Russian artillery pound equal to 491 grams. Cannons were nominated in pounds; mortars and howitzers either in pounds or *poods* (16.2 kg). Calibres convert to the metric system as follows: 1 pdr = 50.8 mm; 2 pdr = 65 mm; 3 pdr = 76.2 mm; 6 pdr = 95 mm; 8 pdr = 103 mm; 12 pdr = 124 mm; 18 pdr = 136 mm; 24 pdr = 153 mm; ½-pood = 155 mm; 1-pood = 214 mm; 2-pood = 263 mm; 3-pood = 327 mm; 9-pood = 386 mm.[43]

Until 1723 there was no strict establishment for field and siege trains. Their composition was rather ad hoc. The siege artillery mainly employed 18 pdr and 24 pdr guns and 3 pood and larger mortars. The field artillery had 3 pdr, 6 pdr, 8 pdr and 12 pdr guns. Infantry regimental pieces were universally 3 pdrs. *Streltsy* and auxiliary troops sent to Poland often used 2 pdr guns of pre-1699 regimental artillery stored in provincial arsenals. Dragoon artillery had 18 pdr howitzers, 3 and 2 pdr guns.

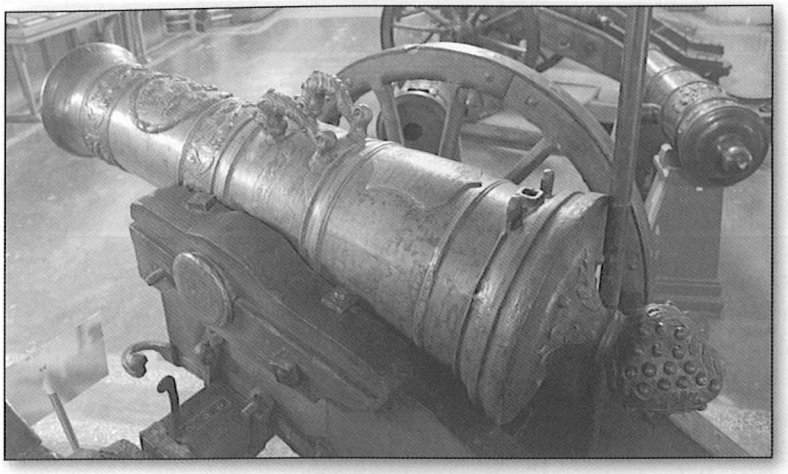
Small mortars, or what is known as Coehorn mortars, seem to have been rather popular with Peter and his circle. In 1704 there were seven 6 pdr mortars employed in the siege of Narva; in the 1710 siege of Vyborg there were 170 small iron and brass mortars. Field artillery had thirty-one 6 pdr mortars in 1715. Besides, these weapons were issued to the infantry at least once – shortly before the battle of Poltava, 20 cast iron Coehorn mortars on portable carriages were sent to regiments. The eyewitness from the Swedish side, pastor Krman, recorded that the Russians fired, among other pieces, from portable guns. Since 1706 the mortars were also mounted onto carriages of regimental pieces.



55. Diagram of a 3 pounder regimental gun on conventional carriage with a box on the trail. 1765. (Unknown officer of the Preobrazhensky Life Guard Regiment)

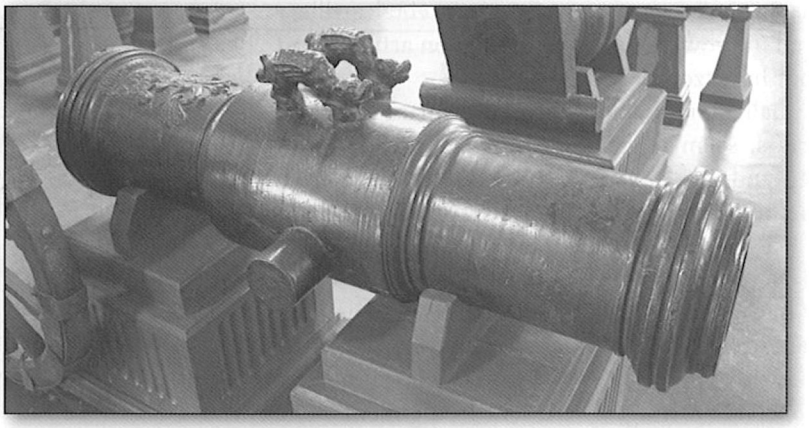
In 1705 in the captured Mitau in Courland the Russians seized a 3 pdr gun that had two small mortars, affixed either side of the barrel. There is no proven connection between the two facts but almost immediately Vasily Korchmin, officer of Preobrazhensky Bombardiers who was present in that siege, proposed similar scheme for the regimental artillery. He designed a cast iron 6 pdr mortar with conical chamber and suggested a 3 pdr barrel that was shorter (105 cm) and lighter (144–272 kg) compared to the previous 1699 model (142 cm, 304–320 kg). This became perhaps the most recognisable Russian artillery piece of the Petrine reign in historiography: the 'galloper'-style carriage with two shafts instead of the conventional trail and limber; two 6 pdr mortars were fixed on the carriage on either side of the 3 pdr cannon barrel. Known in literature as Korchmin's 1706 model this view

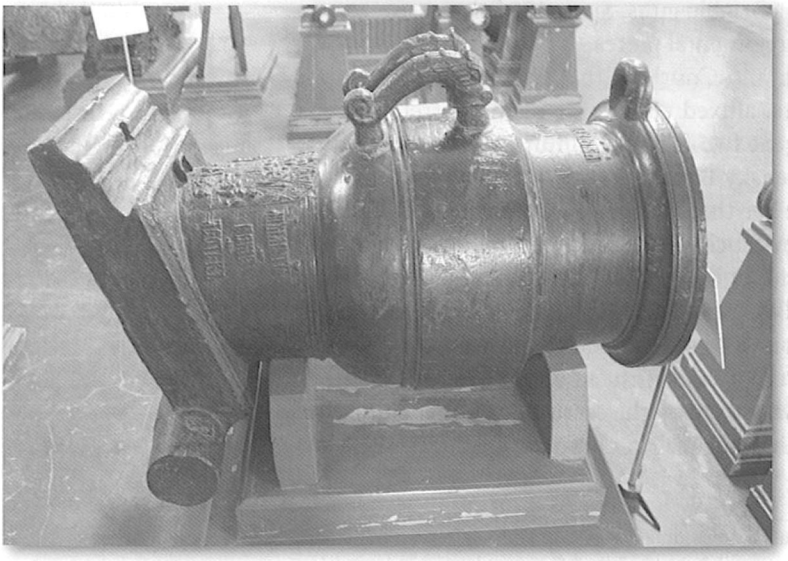
43 Manuscript department, Library of Academy of Sience (OR BAN), P I B N 160, Charts of cannons and mortars, late 17th century; V.P. Vyshenkov, L.K. Makovskaia, E.G. Sidorenko, *Katalog materialnoi chasti otechestvennoi artillerii* [Catalogue of materiel of native artillery] (Leningrad, 1961).



56. 1/2-pood (155 mm) howitzer, 1712. Artillery Museum, St. Petersburg. (Author's photo)

57. 1-pood (210 mm) howitzer, 1701. Artillery Museum, St. Petersburg. (Author's photo)





58. 4½ pood (320 mm) mortar, 1700. Artillery Museum, St. Petersburg. (Author's photo)

seems to have been influenced by late 18th century drawings. The authentic design of Korchmin's regimental guns remains unclear. Charts created by Guard bombardiers from the 1740s until the 1770s name the 'galloper'-style 3 pdr with two mortars as a field 3 pdr gun. At the same time what they name a regimental 3 pdr gun has a conventional carriage with a box on the trail and with a limber. It is probable thus that the carriage of Korchmin's regimental piece did not have shafts but still had mortars somewhere on both sides. During winter the guns may had been transported on sledges, although there is little evidence of it.

Small mortars were designed to fire both case shot and grenades,[44] however there is no available data on how many and what type of ammunition was shot out of the 6 pdr mortars at the Battle of Poltava; at the same time data about other types of artillery is very detailed (this may lead to the conclusion that the small mortars were either removed from regimental guns or were not used during the battle).

59. 3 pounder (76 mm) hand mortar on tripod, 1730s, and ½-pood (142 mm) mortar, 1695. Artillery Museum, St. Petersburg. (Author's photo)

Howitzers were relativery few in the army – in 1701–1706 they were dragoon regimental pieces. In the field artillery there was only one howitzer in 1709 and five in 1715. These fired explosive bombs and case shot.

Petrine artillery had some exotic systems that are worth mentioning, even if we do not know if they were actually used in combat. For example, the surviving barrel of a 3 pdr bronze Korchmin gun has an iron 6 pdr tube attached to the muzzle so that the piece could fire both 3 pdr balls and 6 pdr grenades. Along with the first of Korchmin's guns they produced 20 pieces that had only the two mortars on a carriage without the 3 pdr gun in between – these remained in the Smolensk arsenal in 1709. Preobrazhensky in late 1705 received four mortars on a single carriage. In 1708 a Walloon officer, Le Mestre de Sault, proposed the Tsar manufacture 'machines' of his own invention. Those were some long-range portable mortars, batteries of 50 half pdr guns on a single carriage or other multi-barrelled organs. Scholar Moltusov revealed that these secret pieces were in fact produced, successfully tested and sent to the army in July 1708.[45] Information on their further fate or probable actual combat use is lacking, however. Given they were made by a private person with the support of Prince Menshikov, and manufactured in great mystery without involvement of the Ordnance, it seems that at best it was some short-lived experiment. Despite all the secrecy, de Sault's inventions became known to English envoy Whitworth, who mentioned

44 *Pisma i bumagi*, 5, 1, p. 310, 414.

45 V.A. Moltusov, *Poltavskaia bitva. Uroki voennoi istorii 1709–2009* [The battle of Poltava. Lessons of military history 1709–2009] (Moscow, 2009), p. 352–354.

60. The taking of Azov in 1696. The illustration depicts uniforms from roughly the 1720s–1750s. The picture, however, is more interesting for it shows the design of an artillery caisson and train wagon that were in use at least shortly after the Great Northern War period. (Anonymous artist, mid 18th century. Illustrated manuscript after Krekshin's "History of Peter the Great")

this inventor in his dispatches to Secretary of State Richard Harley. Pastor Krman in the Swedish army must also have heard about those experiments: although he was not eyewitness, he recorded that the guns that shot the Swedes to pieces at Poltava were de Sault's invention and described them as 'leather cannons' of the Thirty Years' War. There were other foreign inventors whose projects impacted the Tsar's budget rather than the enemy.[46]

Ammunition in the field artillery was held in cartridges, i.e. a pre-weighed gunpowder charge together with the ball in a canvas container. The rounds were transported in caissons or 'fast shooting boxes'. This name probably referred to the fact that charging a gun with loose gunpowder on a ladle (as practiced with siege artillery) was far slower than with cartridges. When in March 1708 three 3 pdr regimental guns were sent to Sheremetev's Kievsky Regiment, (the unit had three battalions), these were accompanied with three cannoniers and six fusiliers. The accessories included three ladles, three rammers, three sponges, 15 port-fires, 80 metres of slow match, 180 six pound grenades and 180 mortar powder charges. Each of the six ammunition caissons for these three guns accommodated 25 rounds of 3 pdr case shot, 32 rounds with ball, 70 cannon fuses and 35 mortar fuses.[47]

According to Bruce's order from November 1708 the caissions were to be painted in red, their lids covered with painted canvas bearing yellow cannons and black eagles on a red background.[48] The Saksonsky Regiment in 1721 retained regimental guns issued to the regiment back in 1708, the carriages and wheels painted in red.

In the first siege of Narva the siege batteries fell silent after they fired off their stock of balls, and it turned that the remaining supply of balls did not fit the barrels. Cast iron hollow bombs used to crack when fired, per Sheremetev's claim from the siege of Dorpat in 1704. Other than that the artillery did not face any considerable problems with the shot.

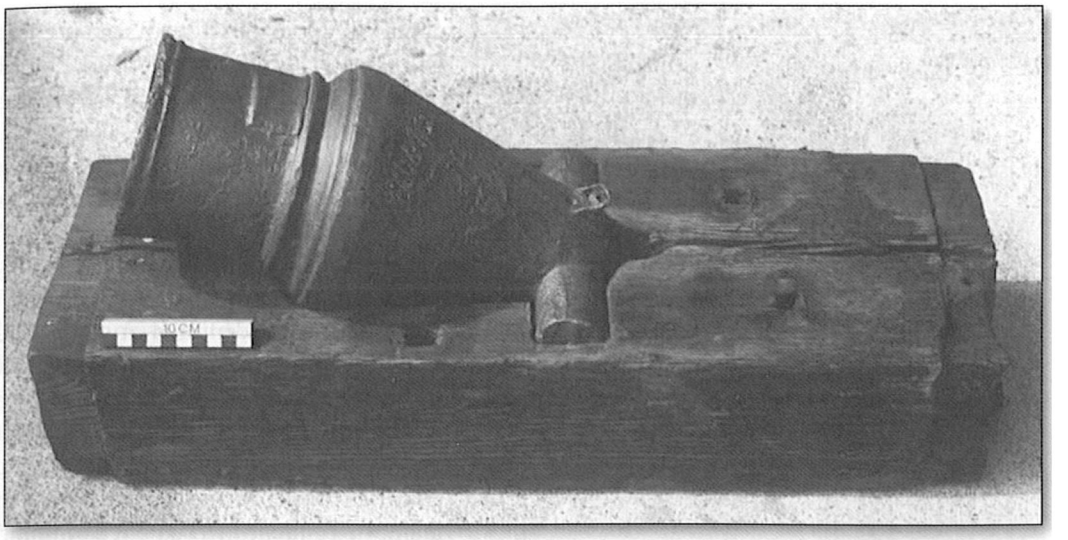
Gunpowder manufactured in Russia received controversial assessments. John Deane, in the navy, wrote that Russian powder was much inferior to Swedish. When in an encounter off Revel in June 1714 two ships exchanged fire, the Swedish shot just reached their target but when the Russians returned fire the ball fell at least one third short of the enemy.[49] Danish envoy Juest Juel

46 *Sbornik IRIO*, T. 39, (SPb, 1884), pp. 464–465; T. 50, p. 10.

47 *Arkhiv general-feldtseikhmeistera Iakova Vilimovicha Briusa* [Archive of General Feldzeugmeister Jakob Bruce] T. 4, Letters of J. Bruce 1708. (SPb, 2008), pp. 83–84.

48 *Arkhiv general-feldtseikhmeistera Iakova Vilimovicha Briusa* [Archive of General Feldzeugmeister Jakob Bruce] T. 4, Letters of J. Bruce 1708. (SPb, 2008), p. 169.

49 [J. Deane] Vice-Admiral Bridge, A.G. Cyprian (ed.), *History of the Russian fleet during the reign of Peter the Great by a contemporary Englishman* (1724) (Navy records society, 1899). pp. 24, 32.



61. 6 pounder hand mortar or Coehoorn mortar, 1714. Jakobstadt/Pietarsaari Museum, Finland.

noted, on the contrary, that it was hard to imagine how much black powder was spent during various feasts, fireworks and dinners, for in Russia powder was as cheap as sand, and hardly one could find another country in Europe where so much black powder was manufactured with quality comparable to Russian production.[50]

Uniforms

Uniform Colours

Every regiment of the Moscow *streltsy* traditionally had its own colour of coat. Distinctive uniforms and flags of 14 regiments were drawn by Swedish envoy Palmquist in 1674; supposedly colours remained without change until the end of the century. The known coat colours of 26 Moscow regiments included several shades of red, yellow, blue, brown, and green, and one unit in white. Arguably, besides coloured coats they had the cheaper grey coat for campaign or fatigue service.[51] Provincial *streltsy* were more likely to wear homespun grey coats but then we have no data on their colours.

The newly created infantry regiments in 1700 received coats of green, dark green, light blue, red, and 'cherry' colours. A single regiment between 1700 and 1721 might change colours every two or three years, when new uniforms were manufactured out of wool of whatever colour was available at that moment. Only few units remained in same colours throughout all war years due to the tradition and their current or past elite status. Thus since the 1690s the Preobrazhensky Guard Regiment wore green with red facings, the Semenovsky Guards blue with red, and the Butyrsky Infantry red with yellow.

The concept of national colours of military uniforms only started to appear in our period. As shown above, shades of green were among the dominating

50 J.Juel, 'Zapiski datskogo poslannika v Rossii pri Petre Velikom' [Notes of Danish envoy in Russia of Peter the Great] in *Lavry Poltavy* [Laurels of Poltava]. (Moscow, 2001), p. 163.

51 S.A. Letin, 'XVII stoletie. Strelets' in *Imperiia istorii*, No. 2, 2002, pp. 12–19.

62. Words starting with Cyrillic letter Zh. Russian male and female costume as it appeared in early Petrine period in the 1694 printed alphabet book by monk Karion Istomin (164?–1717). (Bunin, Leontii (16??–17??))

ones in 1700 and in 1708 Tsar Peter wrote that green was the preferred colour for soldiers' coats. In late 1711 the field infantry in 23 regiments received new uniforms where 65 percent had green coats, 17 percent red, 13 percent blue, and four percent (just one regiment) white. In 1712 it was confirmed that uniforms were to be issued in green, and only if that was not available was blue or red permitted.

Despite the evident aim at green as the main colour, the diversity of uniform colours was considerable in the Russian army of the period. They varied from traditional green, blue, white and red to more unusual colours such as yellow (proposed for Menshikov's Ingermanlandsky Infantry Regiment in 1706 but not implemented; two dragoon units are known to have worn it, however) or 'dead flowers' (brownish-yellow, as observed by Danish envoy in Russian garrison at Narva in 1709). Most of the coloured wool cloth was imported from England, Hamburg, or Lubeck and when this was in short supply white or grey wool cloth manufactured in Russia was used. It was dyed green, and in 1706 in Menshikov's correspondence there is mention of dying using birch leaves; in the same year Korchmin proposed use of herbal dyes from around Smolensk to make brownish-red coats with yellow facings. Sometimes undyed cloth was issued, and in 1707 there were plans to issue white coats with cuffs of distinctive colours. Such were white coats with a red or blue lining issued to Patkul's auxiliary corps in Poland in 1704–1706. Its Russian foot regiments were defeated together with the Saxons in the Battle of Fraustadt in 1706. Beforehand they were told to turn their coats' red lining outward in order to pass for Saxons in the Allied line of battle.[52]

Nevertheless, undyed grey homespun wool was reserved for non-combatants, officers' servants and train drivers – there are several known instructions from 1705–1711 prescribing that their uniforms were grey with blue cuffs and pewter buttons, and thus differed from soldiers.

Blue (often called 'cornflower' in period texts) was one of the popular colours in the army – to name the Semenovsky Guards as an example. It was also a distinctive colour for the Swedish military, but for a while this did not cause problems. On the contrary, in June 1704 Menshikov invented a stratagem where blue-clad Semenovsky soldiers played Swedes and

52 *Umbständliche Relation Von der Victorie, So Ihro Excell: der Herr General Carl Gustaff Rheinschilt wieder die Sachsen und Moscowiter, den 13 Febr. ohnweit Fraustadt befochten*, Hamburg, 1706. p. 3; Adlerfeld, Vol. 2, p. 205; *Archiwum tajne Augusta II*. Vol. 1, Wroclaw, 1843. s. 165.

simulated an attack on the Russian siege camp near Narva. This helped to entice out and defeat part of the garrison. Still, Russian blue-clad regiments had mistakenly been taken for Swedes: an order was issued on 8 August 1708, saying 'do not put on blue coats in battle'.[53] This effectively meant that some regiments had to go out in waistcoats only. Nevertheless, blue remained the widespread coat colour for both infantry and dragoons in the 1710s.

It has to be noted, writes Tatarnikov, that old colours were darker than their modern meanings. For example, red was in fact dark red, 'cherry' was close to brown, 'cornflower' or azure were dark blue. Authentic names of some shades are now hard to interpret.

While regiments may have differed one from another in colour, they kept uniformity within one unit. On several occasions NCOs had coats of different colours to privates: in the Vyborgsky Infantry in 1709, NCOs had green coats while soldiers had white.

Despite occasional colour diversity, green eventually became the distinctive colour of the Russian infantry, rarely found in other armies. Dragoons by the end of the war were to have blue coats with white facings. The standardisation that was finally achieved allowed controlled use of these specific colour combinations. In 1724 a decree stated that when soldiers and dragoons sold their old coats, public buyers were obliged to replace cuffs with other colours, so that green-red and blue-white remained only for foot and horse servicemen.

Oriental Dress in the Early Russian Army

The Russian army entered the war in costume of Eastern type.[54] It was basically a long – below knee – coat (*kaftan*), shorter undercoat (*zipun*), and a sash (*kushak*) on the waist; a fur-trimmed soft cap (*shapka*) and high boots or shoes with stockings were also attributes of the style. By the 1680s–90s traditional Russian dress was influenced by fashions of neighbouring countries. Turkish costume brought diagonal fastening – the breast of a coat wrapped around the body with buttons at the neck and on the waist side. A distinctive Polish feature was the shape of sleeve – broad at shoulder and narrow at wrist, sometimes cut through so one could insert his arm through the cut and turn the sleeve back. By the late 1690s something called 'Hungarian' dress became fashionable. The Hungarian influence, supposedly, was in cords laid along the seams (not necessarily braids on the chest as one might guess), the straight cut of sleeves,

53 *Russkii arkhiv* [Russian archive],1875, book 3, p. 61.

54 For 1680s fashion see the works of Alexei Abramov: 'Pol'skie kaftany moskovskikh dvorian' [Polish coats of Moscow nobles] in *Staryi Tseikhgauz*, 2013, 4; 'Reforma sluzhilogo platia 1680' [Reform of service dress, 1680] in *Staryi Tseikhgauz*, 2012, 1. For late 1690s–early 1700s fashion see works of Sergey Shamenkov: 'Vengerskoe platie pekhotnykh polkov armii Petra Velikogo' [Hungarian dress of infantry regiments of Peter the Great] in *Istoriia voennogo dela: issledovaniia i istochniki* [History of military science: research and sources], 2012. T. I. pp. 421–463; <http://www.milhist.info/2012/07/01/shamenkov> (accessed 4 April 2017); 'Vengerskoe platie pekhotnykh polkov armii Petra Velikogo, chast 2' [Hungarian dress of infantry regiments of Peter the Great, part 2] in *Istoriia voennogo dela: issledovaniia i istochniki* [History of military science: research and sources], 2013. T. III. pp. 466–490; <http://www.milhist.info/2013/03/11/shamenkov_3> (accessed 4 April 2017).

63. Ceremony of consecration of water in Moscow in January 1699. Fragment. 1700. Note officer in knee long ***justaucorps*** with pocket flaps and fashionable pagoda sleeves; he wears a fur-trimmed cap like all his men, who still wear oriental costume. (Johan Georg Korb (1672–1741))

a button fastening along the middle of the breast and a fur trimming. A decree from January 1700 prescribed wearing Hungarian coats garter-long, which was similar to the length of Western coats. In reality, some sort of combination of Russian, Polish and Hungarian costume must have been worn by troops, as can be seen on a few known period illustrations and on the two surviving items. One red and one green coat of Oriental style in Livrustkammaren are said to have been taken by Swedes as trophies at Narva in 1700.

The traditional oriental cap had conical or dome-shaped soft cloth top assembled from wedges. Throughout the 17th century the cap top was rather tall, but by the 1690s we see it became lower, probably per Polish fashion. The fur trimming often had a split at the front. Other ranks had lambskin trimming while officers could afford more expensive fur. The trimming as a rule was worn folded upwards; when cold it was turned down. It was a norm of the time to have the head covered all the times, so in hot weather they still had to wear the same warm caps; in this case men took off the cap and put it on the crown of the head flat or even with trimming upwards as can be seen on a number of Russian and Ukrainian depictions.

High boots were traditional footwear; Moscow *streltsy* traditionally had boots of yellow leather. There were also low native leather shoes, *kurpy* and *chiriki*; little is known about them, presumably they were like ethnographical *koty*: they did not have latchets and buckles, had no heel, had pointed or round toes and perhaps supporting strings wrapped around the shin.

Although the field armies of Sheremetev and Ogilvy most probably changed costume around 1704, it took longer to change the whole army, including garrisons. In February 1705 British envoy Charles Whitworth witnessed in Vilnius:

> The Muscovite foot, however, is much commended on all hands, and one of their regiments, which I saw coming into town two days ago, marched in very good order. The officers were all in german habits, and the common soldiers were well armed with muskets swords and bayonets, but dressed after their own country-fashion in a course sort of sackcloth.

One month later in Moscow he observed: 'The two regiments of guards, and that of Ingermerland are well armed and cloathed, though most of the

64. Wedding of Peter and Ekaterina in February 1712, fragment. Men serving the table were supposedly guard grenadiers or bombardiers. If so, this headgear with pod shape top and low fur trimming might be what they wore prior to introduction of leather helmets. (Alexey Zubov (1683–1751))

rest are but indifferently provided with habits and fire-arms.'[55] It is also probable that Eastern and Western kit was worn in combination during the transition period – for example, we see that some units received new 'German' coats but no hats, nor shoes and stockings; so we may speculate that for some time they kept on wearing Russian-style fur-trimmed cap and high boots with the new coat.

Western European Dress in the Russian Army 1702–1721

The Russian adjective '*nemetskiy*' meant both German and foreign; the foreign being generally non-Russian Western European. A decree from 10 January 1702 prescribed 'to wear foreign dress: upper coats Saxon and French, lower dress – waistcoats and trousers and boots and shoes and caps – German, and ride German saddles'. Wearing, production and sale of Russian costume and saddles were forbidden. The new rule applied to all nobles and townsfolk; clergy and farming peasants were exempt. The decree was repeated on 2 January 1705 and obviously met opposition from the conservative part of society.

Although there are incidental mentions of the Western coats in the army before (for example, musicians in the elite infantry wore it in the 17th century), the introduction of new uniforms only started in late 1702. The first set of Western-style uniforms was manufactured on the occasion of the triumphant return to Moscow in December 1702, after the victorious campaign and siege of Noteburg in October of that year. The manufacturing was done in haste,

55 *Sbornik IRIO*, T. 39, (SPb, 1884), pp. 19, 55.

wool of chosen colours was purchased, 'German-style' stockings were hard to find on the Russian market, buttons on this first occasion were covered with cloth and no more than total 500 kits were prepared for the parade for both Guard regiments. The Preobrazhensky Guard Regiment received dark green coats with red facings, and the Semenovsky Guard Regiment blue with red facings; a third infantry regiment was seen on the same parade in red uniforms where half of the men wore Western style and the other half wore old-style coats. This was the first time when the Russian army was dressed in Western garb in public and it was starting point from where troops started receiving new uniforms. The transition took some time and other foot regiments must had received new German uniforms when their old were worn out and new issue was due. Several foreign witness accounts in 1704 recorded that all Russian units observed near Dorpat, Narva, and in Poland wore German style. In general it is believed that by 1705 most of the Russian field army received Western-style uniforms.

Standardisation of uniforms was lacking, among other things, because several organisations were involved in manufacturing. Dragoon regiments, for example, until 1706 received only weapons and equipment but not uniforms, that were to be purchased by the men themselves. After that dragoons received uniforms from the Ingermanland chancellery, and they differed in detail and in the amount of textile from soldier uniforms manufactured and paid for by *Ratusha* (the organ that collected taxes from towns). The first regulation came in 1708 when the infantry uniforms chancellery was created. It listed details of the kit, and set terms of service. A three year term: coat (preferably green), trousers and cloak; two year term, hat or preferably *karpus*; for a one year term, shirt and underpants, short black neck cloth fastened on the rear, a pair of shoes, boots and stockings. No dimensions or construction were specified, at least they are unknown today. The cavalry uniforms chancellery was created out of the Ingermanland chancellery in 1709. It probably too had its own regulations; in May 1709 it was stated that cavalry now had to have coats of dark green or white, and red cloaks.

The 1712 regulations probably repeated and elaborated those from 1708–1709. Infantry coats (now issued for two and a half years) had 18 buttons (pewter for fusiliers and brass with an eagle for grenadiers). The cavalry coat had 24 big brass buttons and three small buttons on the collar. The next regulation was confirmed in 1720 and its implementation took more or less a decade after the war ended.

Let us now look at particular details of the uniforms and see how they transformed during the war years.

Hats

Broad-brimmed hats were not popular in Russia until the introduction of Western costume. They were manufactured out of a wool felt, and their quality and price depended on what raw material was used. The beaver (castor) hats had the finest quality and were most expensive, whilst soldiers' hats were made of raw and cheap wool.

The hat crown as seen on most of contemporary illustrations, and on surviving hats of Peter I and Charles XII, had a cylinder shape and a flat top.

It was not a semisphere, as modern artwork or replicas often tend to show. Inside the hats had a lining; in 1709 in one of hat factories they used black linen for it.

The brim width was not regulated in the early years, at least no such prescriptions are known to us. The surviving items and iconography show both broad and narrow brims. The earliest known regulation dates back to the 1730s and prescribed brims from 11 to 13.2 centimetres.

Hat brims may have been trimmed with lace, but there is no specification of the lace used for trimming in early years. In December 1702, at the parade mentioned above, Guards had hats trimmed with white lace; a similar observation was made at a parade in 1703. In 1706 wool cloth was used to trim the hats of the Preobrazhensky Regiment: seven companies used wool 'from rotten coats', other companies received wool from Smolensk; we do not know the colour. Hat lace was only regulated in the 1720s when it was to be 2.2 cm broad white wool lace. According to a report of the uniforms chancellery, twelve regiments in 1708–1709 received new hats but only three of them received white hat lace.

The cockade in the early 18th century was a bow of coloured ribbons. Cockades were not typical in Russian uniforms during the Great Northern War, but later from the 1730s until the 1790s it was a white cockade. According to a Swedish intelligence report dated 1717, one infantry regiment – Ingermanlandsky – had 'paper rosettes' (mistakenly translated as 'pink cockades' in Hoglund's book) on the left of their hats. This must have been unusual then, hence it was recorded. No information is known in documents about lace loops and buttons on the hats, although one can often see a button on the left brim of a hat on period images.

The fashion of wearing hats changed over time: brims were turned upwards from one side first and then from several sides and formed a so-called cocked hat or tricorn. There is an interesting letter in Peter's correspondence in 1706. The Tsar, being a colonel of the Preobrazhensky Guard Regiment, was shown a model hat that was proposed for the regiment. He wrote that the hat was good but it had four(!) corners while it should had had three corners as was fashionable then.

It should be noted that contemporary prints often do not show tricorns but instead show rather loose hats where brims were not attached firmly to the crown. A document from a hat factory tells us that a certain length of cord and knitted buttons was allocated for production of one hat; perhaps these were used to attach brims to the crown. A memoir of Naschokin says that in 1723 in Reval, the Tsar went into the rain and 'loosened his hat'. This means that one could tighten the cord or loosen it so that brims fell down and covered the shoulders from the rain. Hat felt was stiffened with glue which, however, was washed out by rain and hats lost their fancy shape and colour.

The cocked hat was worn, as a rule, corner forward. However in this case the left corner touched the musket carried on the left shoulder, so the front corner was shifted slightly to the left eyebrow.

The hats appeared in Russian uniforms together with German coats. However, for example, the Sankt-Peterburgsky foot regiment received Western dress (coats and *kamzol* waistcoats) in 1704 but hats only in 1706.

65. The attack upon the village of Blenheim, fragment. (Louis Laguerre (1663–1721), print after)

66. The Combat of Dobroe in 1708. 1720s. A copy of Laguerre's English scene (above) with Russian grenadier caps and collars – spot the difference. (Rastrelli, Nartov; author's photo).

This might mean that they continued to wear native fur-trimmed caps and their outlook was a curious combination of the two costumes. Azovsky records show issue of German dress in 1704 without hats, too.

Karpus

Another piece of headgear typical for the Russian army during the Great Northern War the *karpus* or *kartuz* – a soft cloth cap with peak and flaps. Compared to a felt hat it was a far more comfortable wear for colder climates; it was popular in the Swedish army and the word *karpus* actually comes from Swedish. It was also known as a montero cap in 17th century Europe, and later as tapabord or bonnet de voyageur in Diderot's encyclopedia. Several caps of this type survive in the Tsar's wardrobe in the Hermitage.

As seen on surviving items, the *karpus* had varying shapes of crown, flaps and peak (none of them, however, resemble caps shown in Viskovatov). The earliest known mention of producing them for the Russian army dates to 1706 when the Tsar and Alexander Menshikov exchanged mails about it. Even earlier, in 1704, *karpuses* were mentioned by a Swedish observer of the Arkhangelogorodsky Dragoons in Narva. In 1708 in a letter that summarised what uniforms should look like in the army, Peter wrote that the *karpus* was the preferable headwear for soldiers. After this letter, caps started being formally introduced to the troops. Danish envoy Just Juel witnessed a Russian infantry regiment (Novgorodsky, Colonel Fichtengeim) returning from Poltava in 1709 'in Swedish headwear'. These might have been not trophy items but Russian *karpuses* that the Dane had not seen before on the 'Muskovites'. The *karpus* became most widespread in the Russian army during the 1710s. In 1711 new headgear was manufactured for 18 regiments: only five of them received hats whereas 13 received *karpuses*.

Per 1712 regulation a *karpus* had one large coat button (supposedly for the top of the crown), and six smaller waistcoat buttons (for fastening of flaps). The front peak was trimmed with broad flat lace or braid, the seams of the crown laid with braid; narrow braid as used to make loops for fastening of the fore edge of the flaps.

However in 1719 purchase of new *karpuses* was forbidden; after 1721 they were excluded from the list of exemplary items and thus went out of use, although were occasionally still worn where hats or caps were lacking. In comparison with the hat, the *karpus* provided better cover from cold, wind and snow. But in summer it was excessively warm and did not adequately protect from the sun, and in bad weather it did not cover the shoulders from rain. Moreover, the *karpus* was more expensive to manufacture than the hat.

In this period there were no regulations about having special headwear for fatigue. The *karpus* was not analogous to fatigue caps of later periods, as it was the only full dress headwear for many regiments that did not have hats. In some regiments hats were few, and were only issued to non-commissioned officers. One case is known where soldiers of the St. Petersburg garrison were issued hats before going on guard duty, while they wore the *karpus* in their daily routines.

Grenadier Caps

Men of the grenadier companies or regiments wore a specific headgear – tall and narrow caps that, unlike broad-brimmed hats, allowed the soldier to sling a musket over his shoulder (which was necessary manipulation before igniting and throwing a grenade). There were no regulation model grenadier caps throughout the years of the Great Northern War, so every regimental commander (or general of a division) could have ordered the manufacture of headgear of his own preference for his men; so the end result most likely depended on a chief's taste, contemporary fashion, available resources and the orders of higher command.

The first depiction of a Russian grenadier cap was printed in 1698 in the so-called 'Manual of Adam Weide'. The cap in that manual was a fur cylinder or shako with no decorations. It is not yet known who were the soldiers depicted in this manual so this well might be a fictional image, but we also may assume this sort of cap might have been in use in *Vyborny* regiments in the late 17th century.

In the early 1700s they must have followed European fashion for fur caps with soft cloth bags. Dutch traveller Cornelis de Bruin saw a Preobrazhensky grenadier company in bearskin caps in December 1702. Heinrich Hyussen observed in November 1703 that Guard bombardiers wore 'German caps with big black trimming'. The earliest known mention in supply documents describes 100 caps of the Vladimirsky Infantry made of red woolcloth and bearskin. Preobrazhensky grenadiers in 1707 received caps with red cloth tops and bearskin capbands; and in 1711 they again received bearskin caps. There are a couple of contemporary Russian pictures that show some sort of caps with low fur cap-bands, although it is uncertain whether these particular models were worn by grenadiers. In 1715 Weide's Grenadiers refused to receive new bearskin caps that arrived because 'they were of old style that is not fashionable any more and it is inappropriate to show in them in foreign lands'. Officers of the regiment then already had red velvet and wool caps embroidered with gold, silver and silk and laid with gold laces.

Azovsky Infantry who received bearskins for their grenadier company in 1704, in 1707 manufactured in Narva new red woolcloth caps embroidered with various silks for grenadiers and musicians. A unique surviving grenadier cap of Petrine times is stored today in a collection of the Suvorov Museum in St. Petersburg, and a picture is included in the colour section of this book. Made of crimson velvet, it has two front flaps, a rear flap and a tall top curved backwards (known as 'pod shape'). The flaps are decorated with embroidery of a double eagle, grenades, 'plants', crossed swords, muskets and bayonets. Judging by the velvet and silk it is an officers' item, but the regiment is unknown (scholar Sergey Letin made a hypothesis that this cap belonged to the de Bois (future Second) Grenadiers, but this proved to be incorrect). Similar caps seem to have been widespread in European armies in the early 1700s: one can see curved tops on the contemporary images of Brandenburg, Dutch, and Catalan grenadiers; there are surviving caps with curved tops in collections of the Army Museum in Stockholm and the Artillery Museum in St. Petersburg (Swedish caps), and in the National War Museum in Edinburgh (Dutch caps).

Menshikov's correspondence from June 1709 reveals that this prince initially planned to give bearskin caps to the three grenadier dragoon regiments but then changed his mind and prescribed manufacture of red, blue, and green textile caps with decoration resembling that on the surviving velvet item: eagle, crown, grenades and plants. In 1708 Menshikov ordered the manufacture of caps for a company of an unidentified dragoon unit, supposedly one of his elite: a blue top with red front and rear flaps, the edges laid with silk white and blue lace. The silk embroidery included a coat of arms on the front and on the rear, of crowns and grenades; the 'name' in the rear flap in gold. Writing the name of the colonel on the rear flap of a grenadier cap seems to be a known practice of the period: at least two Swedish grenadier caps in the Artillery Museum in St. Petersburg bear the names 'GRENADIERS DE DANNENFELD' and 'GRENADIERS DU COMTE MELLIN'.

Another type of grenadier cap for line regiments was a mitre cap with a tall conical top and low flaps. The pointed top with a tassel looked upwards and perhaps could be bent forward or backwards. This type of cap became popular during the 1710s–20s. The mitre caps are shown on another bas-relief by Rastrelli and Nartov on a medallion dedicated to the battle of Dobroe in 1708. The composition and figures on the medallion were taken from Louis Laguerre's painting showing the battle of Blenheim in 1704, with grenadiers and musketeers crossing a river. The Russian artist Nartov, who travelled to England during 1718–19, was probably acquainted with Laguerre's work and copied it. However he gave new caps to the grenadiers: several figures wear leather helmets of a Guards pattern and some wear mitres with decorations different from those of British grenadiers (out of four seams on the top one seam is located in the centre front). This means that most likely this type of cap was typical to Russian grenadiers in the years when the bas-relief was created. The 1721 regulation prescribed red caps with woollen tassels and low white flaps for infantry grenadiers, whereas dragoon grenadiers now had a blue top with silk tassels and red flaps. Perhaps these existed some time prior to their formal introduction. In 1731 new regulation introduced green-red mitres and several pieces of this pattern have survived – they were erroneously depicted in Viskovatov as Petrine caps.

Besides embroidery and decorative applications, grenadier caps might have had metal badges or front plates. The earliest mention dates back to 1696 when General Patrick Gordon ordered plates of white tin for grenadier caps in the Butyrsky Regiment; by 1713 the same unit had gilded brass eagles over a white background. The Guard grenadier 1712 helmets bore tin plates for lower ranks, whereas officers had silver plates on their caps. The plates as a rule were not described in detail in the documents, which only mention a coat of arms which most likely meant a double eagle; at least the post-Petrine plates of the Guard grenadiers bore a double eagle. While in some cases the plates had an elaborate shape (e.g. that of a double eagle), in other cases they were bigger plates that covered the entire front flap of the cap. Such were the 125 gilded plates manufactured by Menshikov's order for grenadiers of an unidentified dragoon regiment in 1707; the blue top of the cap had gold and silver lace, too.

Dragoon units of some generals could afford more luxury: grenadiers in Ingermanlandsky in 1705 had cartridge pouches with brass gilded plates,

and in the Moskovsky Dragoons the grenade bags bore gilded emblems on the lid. Eyewitness of the Russians entering Riga in 1710, Joachim Andreas Helms, recorded that among the horse grenadiers who opened the parade, officers had precious gems and men with 'beautiful Bohemian stones' on their caps.[56] Apparently those excessively expensive decorations went out of use in the 1710s. Regardless, grenadier caps with their decorations – tassels, plates, laces or embroideries – needed protection from the elements on campaign, so the caps were always issued along with covers made of oilskin.

Grenadier caps made of leather for the Guards were first mentioned in Peter's correspondence in 1706, however they were not introduced then, and Guards kept receiving bearskins in 1707 and 1711. It is only in 1712 that we know leather grenadier helmets complete with a front flap with tin plate, rear peak and ostrich feathers arrived for grenadier companies of both Guard regiments. The construction of the cap was supposed to resemble an ancient Roman helmet. This pattern became traditional for the guards throughout most of the century, and a few helmets have survived from the first half of 18th century; they also can be seen in period pictures. In 1719, 412 ostrich feathers were purchased for the two grenadier companies, 12 white ones were for officers, the others were red, two feathers per cap. The helmets were purchased in England although we do not know if similar caps were in use anywhere else in Europe.

Such was the variety of grenadier caps that were in use in the years of the Great Northern War, and it is only in a few cases that we can tell which type and which colour was worn in which regiment and in which years. The general trend seems to be that in the early 1700s they were mainly bearskins, but by the late 1700s they shifted to textile caps with a curved top and later in the 1710s line grenadiers wore mitre caps and Guard grenadiers leather helmets.

It has also to be noted that a grenadier cap was not a prerequisite of a grenadier. For example when grenadier companies detached to grenadier regiments, their parent infantry regiments recorded what uniforms and equipment was given away with them. Ten companies of Boeck's Grenadiers in 1707 all had caps. But the Galitsky, Permsky and Sankt-Peterburgsky Infantry in 1709 show every part of the grenadier outfit except for caps, which may mean they wore hats. A record of the Arkhangelogorodsky Dragoons from the same year clearly states that their grenadiers wore hats.

Hairstyles

Beard shaving is one of Peter's most notorious reforms.[57] For the elites it was not a big shock because since the 1680s there was a certain Polish influence in fashion and many nobles started shaving beards before Peter enforced it; this

56 Joachim Andreas Helms, *Warhafftige Vorstellung Der Merckwurdigen Begebenheiten Bey der Belagerung der Stadt Riga* (1711), s. [27].

57 E.V. Akel'ev, E.N. Trefilov, 'Proekt evropeizatsii vneshnego oblika poddannykh v Rossii pervoi poloviny XVIII v.: zamysel i realizatsiia' [Project of europeization of outlook of subjects in Russia in first half of 18th century: design and implementation] in *Fenomen reform na zapade i vostoke Evropy v nachale Novogo vremeni XVI–XVIII vv. Sbornik statei* [Phenomenon of reforms in Early Modern West and East Europe, 16–18 centuries. Compendium of articles] (SPb, 2013), pp. 153–173.

was not the case with the more conservative aristocracy and lower society. When Peter returned from his foreign trip in 1698 he personally cut off the beards of boyars who welcomed him home. However the first formal rule came only on 27 January 1705 and the decree read that all nobles, servicemen, merchants and townsfolk had to shave moustache and beards; if they wanted to keep theirs they had to pay a big tax. Together with the enforced introduction of German costume this reform led to unrest in parts of Siberia and to a mutiny among *streltsy* in Astrakhan in 1705. To calm people down, in 1706 the Tsar recalled the decree and Russian costume and beards were again allowed at least in Siberia and in the lower Volga area. In 1713 the beard shaving policy was brought back again, and as before it did not affect clergy nor peasants. But those parts of society that were to adhere to the new policy effectively sabotaged it, especially in the provinces. Subsequently the government sporadically returned to enforcing Peter's decrees until in 1763 all bans were lifted and attempts at the 'Europeisation' of Russian outlook stopped.

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68

67. A barber attempts to shave the beard of a schismatic. Lubok, a folk woodcut print, 18th century.

68. This 'Beard badge' indicates that its owner had paid a fee to retain his moustache and beard in 1705.

The military were of course obliged to follow the Tsar's example long before the 1705 decree. The Military Regulation of Peter the Great read that the company *feldsher* (doctor's assistant) was to shave soldiers once a week. There are Tsar's letters where he ordered soldiers to shave beards before parades. Wearing moustaches was not prescribed then, but according to period illustrations it was fashionable to have them upwards.

Drawings show soldiers wearing long hair that covered ears and touched their shoulders. Period illustrations show soldiers of various European armies who wore loose hair, or had hair gathered behind and fixed with a ribbon or put in a bag. Another style was to tuck the hair ends upwards under the hat. These fashions are mentioned in documents of the Russian army in the 1720s, but there were no regulations about hairstyle prior to that. We can only safely presume that soldiers did not cover their hair with white powder, did not wear queues and did not wear wigs. Officers did wear wigs, however.

Neck Cloth

This accessory was a necessary part of period dress. Contemporary illustrations depict rather narrow pieces of cloth. When size of the neck cloth

was first regulated in Russian documents around the mid 18th century, it was to be one *vershok* (44 millimeters) broad and it seems that the same applied to earlier periods. Some period images show neck ties or scarves with loose ends hanging in front. The length of neck cloth manufactured for dragoon artillery gunners in 1708 was 140 centimetres long. This ribbon was wrapped around the neck, tied in front or on the back, and its loose ends either showed over the coat or tucked under the coat or waistcoat.

In 1708 the Tsar ordered that soldiers were to be issued with a short black neck cloth with a fastening. It meant that the neck cloths were to be only as long as needed to encircle the neck once and its ends were connected on the back with hooks or a buckle or with plain cords. The most popular textile for a neck cloth was 'trip' – a fleecy wool fabric, red or black.

Coats

The main piece of clothing, that received the French name '*just au corps*', was developed in Europe in the late third of the 17th century and became universal to many stratas of society, including the military. The Western coat differed from Oriental coats with its cut, details (large cuffs, massive folds and pleats in the skirt, pocket flaps) and length (the skirt touched the ground if the man knelt down).

When referring to Western costume, Russian documents of the period mention 'German', 'French' and 'Saxon' dress; however today it is hard to tell for sure what differences contemporaries saw between them. Period illustrations and surviving items present a relatively similar cut of coats all over Europe. Some details such as cuffs, pockets, collars or fastening, their shape and position might change but the overall silhouette of a coat remained the same.

The skirt of a coat was cut as a broad 'fan' and then gathered in folds on both sides. This created the peculiar feature of the period costume – a knee-length bell-shaped skirt beneath the waist. In order to facilitate horse riding they would turn up the corners of the skirt and fasten them together with hooks and holes – thus turnbacks of a facing colour were seen. Such a practice can be found on period images in the 1700s and 1710s for Swedes, for example; in the Russian army it probably became widespread only in the 1720s – at least we do not see illustrations of it before that.

Particulars of coat cut are rarely found in available period documents, however there is some mention that in early years the coats in the Russian army were double -breasted (had 'double buttons', i.e. both sides of the breast had buttons and loopholes). Breasts had coloured lining all the way down and could form lapels if fastened with buttons. As seen in some iconography, lapels could be fixed with topmost buttons only, thus forming small triangular lapels. Another method was to turn the lapels along all of the breast until the bottom of the skirt. Alternatively, a breast could be all fastened so that no coloured lapels were seen. According to the Tsar's correspondence, the Preobrazhensky Guard Regiment was to get single-breasted coats in 1708, and the rest of the army eventually followed the pattern, but some regiments were known to wear double breasted coats as late as 1711. A unique portrait of 'the first Russian soldier' Bukhvostov shows a coat of a slightly different pattern that has a double breast visible until the waist, thus forming large

triangular lapels. Similar lapels are found on some European period drawings of the 1700–1720s.

The majority of the period visual sources, however, show single-breasted coats. This type constitutes also the vast majority of surviving items in museum collections. It looks like in the Russian army it came into use after 1708.

Illustrations tend to suggest that in the early 18th century it was more common to have buttonholes all along the breast. In 1708, when Peter gave instructions on the manufacture of new coats to the Preobrazhensky Guard Regiment, he prescribed it as single-breasted and to cut holes only until the waist. Peter's own coat, worn by him at the Battle of Poltava in 1709, was cut this way. Buttonholes might have been trimmed with coloured cloth or cord.

69. Coats from Peter's wardrobe collection. Hermitage, St. Petersburg. Note rare double-breasted coat with lapels turned out.

Numerous buttons and cut-through button holes were a typical feature of a European coat. Besides fastening on the breast, there were buttons on other parts of the coat such as cuffs, pockets, in folds, and on the waist side. The overall quantity and position of those buttons changed over time. There are no known exhaustive regulations on this matter, however there are a number of references in various documents that help: 36 buttons on a dragoon coat in 1706, 26 buttons on an artillery coat in 1708, 26 buttons in 1709 for the Semenovsky Guard Regiment, 18 buttons in 1717 for line infantry. Uniform buttons were most often hollow brass (two parts soldered together) or cast tin, or covered with cloth. Buttons as a rule had a plain surface but those bearing a double eagle were also issued.

The quantity of buttons on the breasts of the coats of the Preobrazhensky Guard Regiment depended on coat size (12 buttons on large coats, 11 buttons on medium). In line regiments, however, the number of buttons was fixed irrespective to the size.

Most often buttons and holes were evenly distributed along the breast, but sometimes one can see on European period drawings that buttons were grouped together (two or three buttons in a group) with a gap between groups. Menshikov mentioned in his correspondence that the Tsar did not like this manner, which is probably why it did not become popular in Russian military uniform.

In early years, the coats had a low stand-up collar of the same colour as the coat – as seen on Peter's coat worn at Poltava – or there was no collar at all. Turndown collars of facing colour are mentioned as early as 1704 for artillery and 1706 for dragoons. The so-called 'cavalry' collars on dragoon coats had three waistcoat buttons, probably they turned upright and fastened to protect the face from wind or dust. However

70. 'Halberd men', probably guarding NCOs at the Emperor's funeral. 1725.

it seems that turndown collars became widespread in infantry uniforms later, during the 1710s; for the Guards the first mention dates to 1712.

Sleeves, according to fashion of the period, were rather baggy in the 1700s and became tighter later on. Sleeve cuffs on period pictures and surviving items tended to be round (without a slit) in the early 1700s and with slits later in the 1710s; so called 'Brandenburg' cuffs with a flap were another type of cuff of the period, albeit not so often seen on Russian uniforms. A presumption of Sergey Letin is that only Guards had buttons on their cuffs – and this explained why the overall number of buttons on coats for Guard and line regiments differed.

Pockets were located on the fore part of a skirt and were covered with flaps of varying shape. Horizontal pockets – which were more common – had flaps which varied from narrow and nearly rectangular in early years to pentagonal or with some curved edge. According to visual sources, pockets were positioned rather low in the early 1700s and later on they lifted up towards the waistline, where breast fastening ended. In European costume one could find vertical pockets, however there was hardly this type in Russian uniforms.

Shoulder straps if existed at all were merely functional and were not insignia in those years. These were pieces of cloth or cord, often on the left shoulder, used only to fix the shoulder belts of equipment. A few descriptions of shoulder straps are found in documents during the 1720s only.

Waistcoats

The garment named *kamzol* in period texts was worn under the coat and as such it was barely seen at all. Later in the 18th century the waistcoat became shorter, losing its sleeves and eventually became a vest. But in the early 1700s it resembled a coat in cut, was only a palm-width shorter, had a smaller skirt, and no cuffs on the sleeves.

Fashion of the period allowed that the waistcoat was seen from under the coat and the shirt and the neck cloth were seen from under waistcoat. So, when the weather allowed, it was not unusual to have a coat unfastened or fastened only by a few lower buttons. The waistcoat, too, might have been fastened on less than all buttons. Waistcoats had smaller buttons than the coats and documents mention these buttons separately from larger coat buttons. Their quantity varied over time as well: there are mentions of 22 buttons on waistcoat in 1704, 26 in 1706, 18 in 1717, and 21 in 1720.

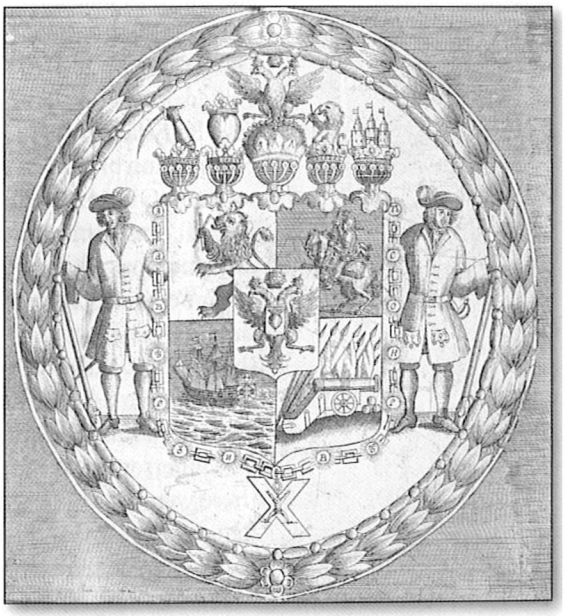
From the visual sources, they wore a waistbelt (or *port-epee*) either over the coat or over the waistcoat (and thus under the coat). Later in the mid 18th century the 1763 regulation in the Russian army prescribed a waistbelt over a waistcoat from April and until September, and between May and August only

a waistcoat was worn. However, no such regulation is known for the early 1700s.

It is probable that in the summer men wore only a waistcoat without a coat. Rosters of uniforms lost in actions of Dobroye, Lesnaya, and Prut by the Preobrazhensky Guards show that the killed men had trousers, waistcoats, and hats, but not coats. In the Semenovsky Guards men had their coats rolled on the saddle when fighting on foot in the Battle of Poltava and some lost their coats when horses ran away. The large Poltava painting by Louis Caravaque, finished in 1718, shows guard grenadiers and musketeers fignting in red waistcoats. On the contrary, cavalry seem to have ridden in coats in action, for the Kropotov Grenadiers and Troitsky Dragoons show their men killed at Poltava in full kit complete with coats. Still, it is hard to tell if that was common practice during the Great Northern War.

Early in the 1700s, waistcoats were issued to the troops along with the rest of the uniform. When short supply of quality wool became obvious, they started to save costs. In 1707, Peter ordered that waistcoats were to be manufactured out of grey or white undyed Russian wool or out of old coats. One year later, this practice was put into regulation. Infantry waistcoats were then to be made within regiments out of old coats or cloaks. The guards, however, continued receiving their red waistcoats, and dragoons had leather waistcoats.

71. Coat of arms of Prince Menshikov, by Picart, 1707 (above) and by Zubov, 1714 (below). The two supporters were meant to depict Western clad soldiers of Preobrazhesky in green and, supposedly, Ingermanlandsky infantry in blue coats. The supporters, however, vary: on the 1707 version they have buttons all along the coat – which may and may not reflect actual outlook of Russian soldiers then. Soldiers certainly did not wear long wigs and ostrich plumes on hats, as shown in the picture.



Trousers

Trousers were little longer than knee height, were rather spacious in the seat and hence had a lot of folds in the rear. Two types of fastening were used then: a front flap (bearer) and with a fly. The majority of the Tsar's surviving trousers have slits and buttons on the lower end of the trouser legs, however lower ranks had mere drawstrings on the trouser legs, with neither cuffs nor buttons. Like the waistcoats, trousers were initially made of quality colour wool but later they shifted to less expensive textiles. In 1708–1709 trousers were made out of aba, a Russian-made white wool. But as long as trousers were to be durable, they returned to tougher material: in 1710, trousers were made of quality colour wool or out of leather. Woollen trousers were too thick and were

especially uncomfortable during the summer heat. Leather was durable and practical but its quality depended on the manufacturer. Elk or deer skins prepared by craftsmen in Narva or Reval were of better quality and were more expensive. Goatskin prepared by Russian craftsmen was cheaper but was more susceptible to the effects of heat and wet. In any case, leather trousers were widespread in the Russian infantry during the 1710s.

Stockings

Stockings existed in Russian pre-Petrine costume, although they differed from the Western version. When in autumn 1702 the Tsar ordered the manufacture of 500 Western uniform kits, it turned out that it was hard to find enough 'German style' stockings red in colour. In order to complete the task in time they gathered stockings of whatever shades close to red were available. There is a steady myth about introducing red stockings to the Guards after their distinction in the unfortunate Battle of Narva in 1700 (as if they stood in blood knee high), but it is not supported by sources. The most common stocking colours issued in the Russian army during the Great Northern War were red, blue, or cheaper white or grey.

Two pairs of stockings in a year were due to a soldier per the 1708 regulation. Those were most often knitted of woollen thread, but were also cut and sewn, and even felted stockings were not unheard of. In an emergency they could make stockings out of old canvas tents, as Peter ordered the Preobrazhensky Guard Regiment to do in 1712.

According to the period illustrations, stockings were long enough to cover the knee and were worn over trousers. A garter – a leather or textile belt with a buckle – was wrapped around the leg under the knee and kept the stockings in place.

Gaiters

Prince Boris Kurakin travelled in Europe and in 1706 recorded that he saw Prussian grenadiers who had 'canvas covers' on their stockings. This observation probably means that this item was not known in Russian uniforms by then. Originally, this was merely a utilitarian item and did not belong to the full dress. It preserved the feet from mud, cold, and water and preserved the stockings from wearing out on campaign. The first mention of covers is found in December 1707 when Field Marshal Boris Sheremetev ordered that his troops prepare for the winter campaign and make a *Stiefelette* from the skins of slaughtered bulls. In 1712, the Tsar recommended that gaiters should be made out of old canvas tents. It is believed that gaiters became widespread in the Russian army after the 1712 campaign in North Germany.

Gaiters were manufactured within regiments out of local supplies, so at first there were no regulations as to their dimensions or appearance. From period depictions from both Europe and Russia, gaiters were just like stockings, came above the knee and were fixed with a garter. Unlike the stocking, the gaiter had a side fastening on the outer seam (12 buttons) and a flap that covered the shoe, thus preventing mud, rocks or snow from filling the shoes.

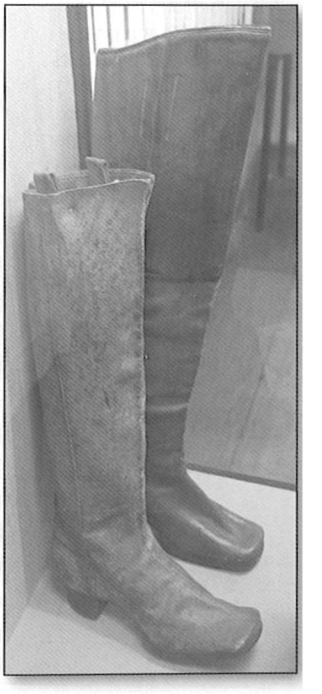
Shoes

This most typical footwear was an ankle-high black shoe with a thick sole and a high heel. Two pairs of shoes were issued (or were to be issued) to a soldier in a year. Toe shape varied – a pointed or round toe cap can be found among text documents, period illustrations and surviving items, however a rectangular shape seems to have been most popular. It is known that in the 1720s such shoes were issued to foot soldiers while shoes with pointed (viz. rounded) toes were issued to sailors. A shoe had a long tongue and two side latchets. The latter were fastened with a buckle or with a lacing. A letter of the Tsar's from 1708 mentions sending shoes without buckles and with laces to the army. In December 1711, Peter explicitly wrote that supply of shoe buckles should be stopped because in other armies the soldiers had tie-laces instead of buckles on their shoes. Nevertheless, documents show that shoe buckles were still sent to regiments during 1710–20 in considerable numbers.

Although left and right shoes were known then, for economy the army cut soles without distinction between the two. Soldiers thus wore identical shoes on both feet. Some particulars of such footwear can be found in a document by Alexander Suvorov when he was an infantry colonel in the 1760s. It was recommended that soldiers swap shoes from right foot to left and back again which helped soles and heels wear out evenly and last longer. In winter time, straw was put inside the shoes to prevent cold.

Shortages of footwear were not uncommon during the war. It is known that soldiers wore out their shoes during the 1708 campaign and by autumn had to make footwear on their own out of old skins. In 1712 General Adam Weide reported that the soldiers of his division had their only pair of shoes worn out in nine months and many were barefoot. Native types of shoes of an unknown appearance remained in some use; Peter's correspondence in 1708 mentions that *chiriki* were to be manufactured for the troops along with ordinary shoes and boots. *Kurpy* were issued to the Novgorodsky, Sibirsky and Yaroslavsky Infantry in 1709–1711.

72. High boot of private and officer, 18th century. Exhibition of Tver Everyday Life Museum. (Author's photo)



High Boots

The popular concept of an 18th century foot soldier shows a figure in shoes with stockings or gaiters. However, in the Russian army high boots were also issued to the infantry, one pair per year. Although a document from 1706 says that some 10,000 pairs of 'German style boots', whatever that meant, were to be purchased for soldier regiments, it is equally probable that troops wore boots of native fashion. Several 17th century images show above-the-knee soft bootlegs wrapped with a garter below the knee, just like stockings. A few documents mention that boots were made of cowhide leather and had a round or pointed toe cap. Surviving items, albeit shorter, sport rather high heels. The infantry kept wearing high boots until the 1780s, and in the 1760s a document by Suvorov described them: the boots had high, over-knee long, bootlegs of soft leather. The top covered the knee or could be pulled down; the bootleg was held upright due to a garter pushed through boot pullstraps. One can speculate that the same boot construction was in use in the course of first half of the century.

73. Soldier in winter dress. 1750s. The figure demonstrates combination of Western accessories (hat, sword) and traditional costume more appropriate for cold (mittens, high boots and fur coat over waistcoat). Although this peculiar mix dates to several decades later than our period, the same was probably widespread in winter in Peter's reign, too. (Augustin Dahlsteen (1720–1769)).

Records in individual regiments in some cases show only the issue of boots (Narvsky, Rostovsky and Voronezhsky in 1710, Belgorodsky, Butyrsky and Sibirsky in 1711). Some regiments were issued a pair of shoes and boots at the same time – Boeck's Grenadiers in 1708 and 1709, Kievsky, Sibirsky and Vologodsky in 1710; Narvsky and Novgorodsky in 1711. The men of Tverskoy in 1710 and Voronezhsky in 1713 received one pair of boots and two pairs of shoes.

When regimental records show that, for example the Vladmirsky Regiment in 1703 received Western coats and hats but the arrival of stockings and shoes is only shown in 1709, we can assume that they kept wearing boots from their earlier Oriental kit. Another explanation would be that their stockings and shoes were privately purchased and thus were not reflected in regimental records. This can also explain why shoes and stockings were never mentioned amongst belongings of the Guards when they became mounted infantry between 1707 and 1712. Several documents do mention supply or loss of dragoon boots in the Guards, but none mention shoes. So it is still probable that the Guards fought in high boots at Poltava, contrary to the conventional view of Guardsmen in red stockings and shoes.

The cavalry jackboots of the 'German', i.e. West European, fashion survived in many collections as well, as they appear in numerous period drawings. They had square toes, sturdy high bootlegs, knee flaps, high heels and a spur with flaps. Dragoon boots were perhaps somewhat softer but in general had a similar appearance.

Blackening of the footwear, as well as making it with the rough side of the leather out, was a'German' feature. Native shoes and boots had the smooth side of leather outward and had natural leather colours from reddish to yellow.

Cloaks

A cape with broad turndown collar was to cover the men from cold and rain. Cloaks were made of wool and lined with coloured canvas at the shoulders, breasts and rear slit. The only fastening was a hook and loop buckle at the neck. This garb was not too comfortable. The collar was not broad enough to cover the head from wind or rainfall, the breast was open, and there were no sleeves.

The same colour of cloaks was maintained for Guard units throughout the years of the Great Northern War. The Preobrazhensky Guard Regiment had dark green, and the Semenovsky Guard Regiment had blue with a red lining. Line regiments' cloak colour changed over time, and it depended on whatever wool was available when the time came to manufacture new uniforms. The Tsar recommended in 1708 to make cloaks out of 'plain' wool, i.e. grey or white, once every 3 years. In fact, in that very year four regiments

received green and red cloaks and six regiments received grey cloaks with red, blue, or yellow lining. During 1710–20, it was common to have cloaks of green, red, and blue wool with red, blue, green, white, or yellow lining. The collar of the cloak was in the facing colour in the 1720s, however that is unlikely to have been the case from 1700 to 1710.

When a soldier did not wear his cloak or did not leave it on the equipment train, he carried it with him in a roll. Prince Kurakin in his memoirs left a mention of this way of carrying the cloak in the Prussian army, in 1706. Still, the first known evidence of Russian soldiers carrying a cloak in a roll over the shoulder is a drawing of an artillerist from the 1720s.

Just as happened with other items of uniforms, there were often interruptions in issuing new cloaks to the troops. For example, an order to manufacture 18,000 cloaks for 15 infantry regiments was given in May 1708, however only 10,000 cloaks were ready by February 1709. This means that the soldiers spent most of the winter without cloaks. In 1712 General Adam Weide was complaining to the Tsar that the men of his division did not have cloaks and in consequence their coats wore out sooner than was expected.

The appearance of troops was often far from ideal. The timely arrival of new uniforms was hindered by a shortage of textiles or by slowness of the supply system. So it was not uncommon for soldiers to wear old, worn out, faded, and torn uniforms. Even the Semenovsky Regiment (the Guards!) was to receive new uniforms in the summer of 1708, but the cloaks arrived only in January and coats with waistcoats were expected to arrive in February 1709.

Gloves

In 1720 all infantry regiments in Finland received 80 pairs of knitted wool (or rarely, leather) gloves for NCOs, corporals and regimental clerks. Earlier in the 1710s gloves were issued to some regiments in small numbers (from a dozen to a hundred) which probably also were destined for NCOs only. Tatarnikov writes that Grenadier regiments had gloves too, although they were not prescribed. Dragoon regiments had gloves for all their men. Preobrazhensky received gloves once in 1714.

Officers' Uniforms

While uniforms made per one or another standard were issued to soldiers, officers' uniforms were not specified in any way. We cannot even be sure their colour matched that of their soldiers. For example a list of belongings of deceased officer of the Kropotov Horse Grenadier regiment in 1721 included light green, white, and blue coats when men of the regiment had blue coats with red facings.[58] Wealthy officers could had had richly decorated coats with lace for special occasions, however they would probably refrain from wearing it every day on campaign.

The guard officers in 1720 officially and probably earlier in 1710s in fact received all green coats (complete with cuffs and collars) trimmed with gold

58 V. Egorov, 'Kapitan Pervogo konnogrenaderskogo polka 1717–1720' [Captain of 1st Horse Grenadier regiment 1717–1720] in *Tseikhgauz*, 1995, 4, pp. 6–7.

74. Guard Lieutenant's gorget with the Narva battle honour. 1701.

lace, and green waistcoats and trousers. So there was no difference between officers of the Preobrazhensky and Semenovsky regiments; this colour scheme remained unchanged throughout the entire 18th century. One may guess that this followed the Swedish manner where officers had all-blue uniforms with no facing colour.

The distinguishing items of officers were gorget and sash. Gorgets were already in place by 1700 in the Guards, and the Tsar wore one of that early type. A new model of gorget was issued to Guard officers in 1701.[59] Elements of the gorget – field, trimming and emblem – were either silver or gold and combination of the two metals indicated the rank of the owner. Colonels had all gold, captains a gold field with silver trimming and emblem, Lieutenants a gold emblem on silver field, Ensigns, a silver field, gold crown and the remaining elements of the emblem silver. In 1715 the same scheme was confirmed with the addition of two ranks: captain-lieutenant silver elements on a gold field, second lieutenant a gold field and crown, silver for other elements. The emblems included St. Andrew's cross, a crown, palm leaves and the inscription '1700No19'. The latter commemorated the feat of the Guards in 1700 at Narva when senior officers of the Guards either were killed or taken prisoner, and both units were led in action by junior officers. Despite the army being defeated and even the Guards losing several flags, Preobrazhensky and Semenovsky were the only units on the right flank of the army who offered stubborn resistance to the victorious Swedes. This inscription, the date of the Narva battle, was a collective reward to officers of the Guards and it remained on the gorgets of both regiments until they were disbanded in 1918. It is also one of the earliest-known battle honours.

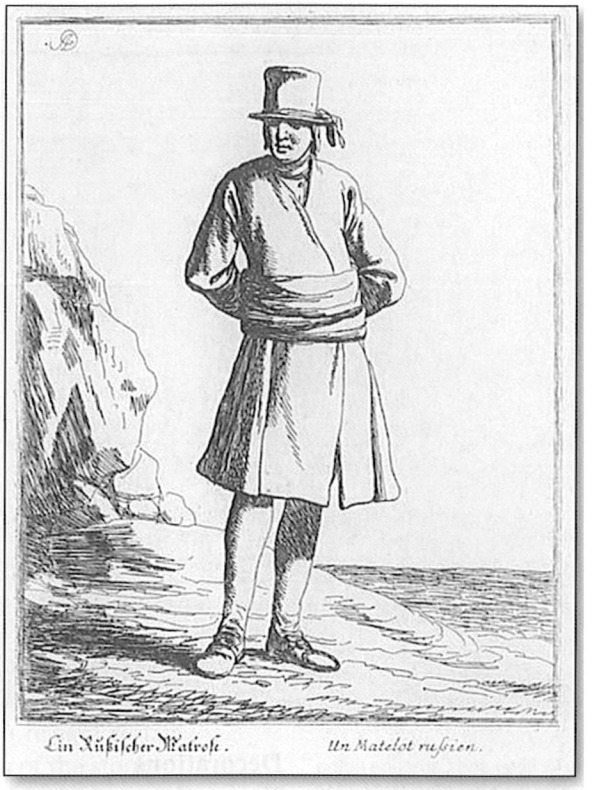
Officers of line troops probably did not have gorgets in the 1700s. The earliest known mention is from December 1718 when General Repnin reported that all officers in his division purchased gorgets and silk sashes at their own expense. Menshikov's Ingermanlandsky Infantry Regiment in 1718 received officers' ensignia, and their gorgets bore Menshikov's monogram.

Sashes were probably not universally adopted until late in the war or even after it. For example, officers in the 1st Grenadiers, Kievsky, and Chernigovsky Regiments in 1720 did have gorgets but did not have sashes nor *kurtzgewehr*. Those surviving sashes belonging to Peter the Great are tricolour – white, blue, red – and have tassels on both ends. An account of the Tsar on parade in 1703 has him wearing a white and red sash over the

59 K.V. Tatarnikov, 'Russkie ofitserskie znaki 1701–1761 gg. Dopolneniia k odnoi neizdannoi state' [Russian officer gorgets 1701–1761. Addendum to an unpublished article] in *Istoriia voennogo dela: issledovaniia i istochniki* [History of military science: research and sources], 2016, T. 7, pp. 461–475. <http://www.milhist.info/2016/02/09/tatarnikov_2> (accessed 4 April 2017).

shoulder. According to period illustrations there were two ways of wearing the sash, either on the waist or over the right shoulder. Most probably sashes and gorget became standard ensignia for officers in the late 1710s and 1720s.

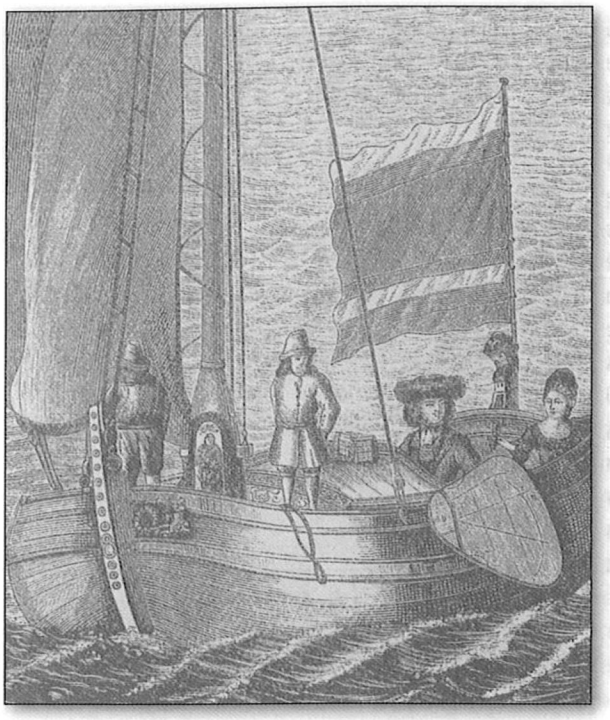
Officers of the two first dragoon regiments from 1700 until at least 1702 had breastplates and helmets. One cuirass was actually lost in the battle of Erastfer in 1701 – it may had been on a dragoon officer or a *Reiter*, or someone from the irregulars. Seven infantry regiments of Weide's Division in early 1701 show that they had 30 kits of armour ('cuirass with shoulders, tassets and helmets'); perhaps those were destined for officers. Boris Sheremetev returned to Pskov from his first victory at Erastfer wearing his armour, although it is unclear if that means he actually wore it in combat.



75. Sailor. 1750s. (Augustin Dahlsteen (1720–1769))

Navy Uniforms

Sailors' uniforms of the early years are unknown; since sailors were mainly Europeans on hire, they must have worn something they were used to. One of the earliest known mentions of uniform for the navy was purchase of 3,000 soldiers'hats and 1,500 'English caps' in 1705. The first decree to regulate navy uniforms went out in December 1710. Accordingly in 1711 sailors were issued with a short jacket (*bostrog*) with horn or pewter buttons, and trousers of grey wool; work dress of the same items was made of white canvas. Stockings, shoes with buckles, underwear, and round knitted caps were in the kit, too, for a two year term. Since 1719 uniform was differentiated according to rank. Sailors of the 1st and 2nd class, and gunners, had jackets of cheap coloured wool and canvas trousers; gunner NCOs, corporals, and quartermasters had jackets of quality English woolcloth. The colour was unspecified and they used what was available, for example documents mention black, light blue, blue, or green. Besides coloured woolcloth jackets and canvas trousers that served two years, these same categories of men had jacket and trousers of white linen with blue stripes and a canvas jacket with grey wool trousers per one year. Sailors of the 3rd class had jackets and trousers of homespun grey wool. All the men had a knitted cap, striped neckcloth, underwear, two pairs of stockings per year, and three pairs of point-toed shoes in two years. What was not in the regulation but seems to be often worn by Russian sailors throughout the entire 18th century was a red sash on the waist; it is seen on period ilustrations and must have come from the Russian native costume. Several grey wool knitted



76. Peter and Catherine riding a boat on the River Neva, 1716. Note the two sailors. (Alexey Zubov (1683–1751))

caps, sailor jackets, and trousers belonging to Peter's wardrobe survive today.[60]

The galley prisoner-oarsmen in the early period of the war had grey homespun wool coats and trousers and red caps. Men of the galley fleet in the 1720s and 1730s received their uniforms less regularly, and they were of poorer quality compared to the sailing fleet. Navy officers' uniforms was not regulated in any way.

Data about uniforms of the Marine Regiment is scarce but it seems the coats were green before and around 1710. Instead of waistcoats as in the land forces, marines had gray *bostrog* jackets and trousers after the sailors' fashion. Blue coats with red facings were introduced in the marine battalions in 1719. The coat was to be issued once in five years which meant they wore it rarely. The grey sailor jackets and trousers as well as red or blue stockings were issued yearly. In 1718 the cartridge box on a shoulder belt was replaced with a belly box.

Decorations

There was no system of decorations comparable to European countries prior to Peter, and in 1698 he introduced the first decoration for his country – the Order of St. Andrew the Apostle, who according to belief confessed in Russia. Its blue ribbon was worn over the right shoulder; its badge with a diagonal St. Andrew's cross and double eagles was initially worn over the neck, then on the left hip where the ribbon joined. The star of the order, attached to the left breast of a coat, had eight beams and bore the motto: 'For Faith and Fidelity'. Overall 41 individuals received the St. Andrew during Peter's reign. Most of them were high-ranking commanders, some were allied monarchs or their envoys, and members of the Romanov dynasty had it too, of course; a few less-deserving individuals managed to receive it such as French engineer Lambert de Guerin who received the order in 1703 for some hardly extraordinary achievement and then deserted in 1706. Still, St. Andrew was a rare decoration and most servicemen could not count on receiving it.

60 A.V. Anan'in, Snabzhenie russkogo flota obmundirovaniem v period Severnoi voiny' [Supply of uniforms in Russian navy during the Northern War] in *Severnaia voina, Sankt-Peterburg i Evropa v pervoi chetverti XVIII v. Materialy mezhdunarodnoi nauchnoi konferentsii. Sankt-Peterburg, dekabr 2006 g* [Northern war, Saint-Petersburg and Europe in first half of 18th century. Proceedings of international conference. St. Petersburg, December 2006] (SPb, 2007), pp. 181–183; K.B. Nazarenko, 'Snabzhenie obmundirovaniem nizhnikh chinov russkogo flota v 20-kh – nachale 30-kh gg. XVIII v. po dokumentam Nauchnogo arkhiva SPb II RAN' [Supply of uniforms to other ranks of Russian navy in the 20s and early 30s of the 18th centuries] in *Istoriia voennogo dela: issledovaniia i istochniki* [History of military science: research and sources], 2015. T. VII. pp. 196–215 <http://www.milhist.info/2015/10/14/nazarenko> (accessed 4 April 2017).

Two more decorations were introduced by Peter. The Order of St. Ekaterina, 'For Love and Fatherland' was introduced by Peter in 1714 as reward to his wife Ekaterina who accompanied the army in the unfortunate 1711 Pruth campaign; later it became a decoration for women of the monarch's family and for female aristocrats. The Order of St. Alexander Nevsky was designed by Peter but introduced only in 1725 after his death. It bore the motto 'For Labour and Fatherland' and was given to military men of the rank of Lieutenant-General and above, and to high-ranking civilians. An enamel portrait of the monarch adorned with diamonds and worn on a bow of blue ribbons was another high decoration, albeit not an order as such.

While orders and portraits were as a rule given to generals, ordinary officers and lower ranks wanted their own decorations. Coins of gold or silver were common decoration for 15th–17th century Russian troops and this practice remained in the early 18th.[61] Other ranks in 1702–1704 were given silver coins of 50 kopeks (*poltina*) (36 mm in diameter), in 1704–1708 silver rubles (42 mm). A coin was sewn to a coat through a drilled hole for there were neither loops nor ribbons. The officers' first decoration was a golden *poltina* medal for their participation in the battle of Erastfer.

Over time special round medals were minted to reward certain specific feats. Such were the medals for participants of the storm of Noteburg (Guards only), the taking of Swedish ships on the Neva, and the Battles of Lesnaya, Poltava, Perevolochna, Napue (senior officers only), Gangut, Ösel, and Grengam. Usually officers received golden medals, others silver. NCOs' medals for Poltava were a little larger (49 mm) than those of privates (41 mm). One side universally bore the monarch's portrait, and the reverse as a rule showed the silhouette of a battle with its name and date. The first medal on a ribbon was issued to reward NCOs who took part in the Menshikov's victorious Battle of Kalisz in 1706: it was silver, had an unusual oval shape and a bow of blue St. Andrew ribbon to be worn in a coat loophole – the way the later medals were worn. All veterans received a special medal on the occasion of conclusion of the Nystadt Peace in 1721. Apparently, this system of decoration for lower ranks was a novelty in Europe. Apart from the reward medals there were a series of memorial medals minted on one or another occasion as a method of propaganda – the practice that was widespread elsewhere.

Medals or medal-like coins were not the only reward. After Poltava, all other ranks of Guards received an extraordinary one year pay. On other occasions, officers and men received from one- to three-monthly salaries or promotion to the next grade with respective increase in pay.

77. Portrait of the Sovereign with diamonds.

61 N.I. Chepurnov, *Rossiiskie nagradnye medali, Chast 1. Medali XVIII veka* [Russian award medals, part 1, medals of the 18th century], (Cheboksary, 1993).

78. Silver medals for Poltava and Gangut.

Flags

Every foot company (except grenadiers) had its flag, thus making up eight to 12 per regiment depending on period. Dragoon flags were first issued one per two companies, totalling five flags; later one per company, totalling 10. The first company flag was invariably white, whilst the other company flags were coloured. The banner was made of silk textile with a flowery pattern; some details of design were sewn and most of the pictures were painted with oils. Initially the banner had a red textile bag to insert the staff, but later the flag was wrapped around and nailed.[62]

The 1700 infantry model was 210 cm broad and 200 cm high.[63] White flags bore a double eagle. Company flag designs with minor variations included palm leaves on both sides joined in the lower part; an oval chain in the centre encircled the Lord's hand with a sword pointed downwards; the St. Andrew badge hung below the chain. The badge is known in two versions, as a cross and in oval. The number of a company was sometimes indicated with a respective quantity of stars, e.g. on 1700 Guard flags. Two surviving line infantry flags in the Hermitage collection bear the numbers 2 and 5 below palm leaves that probably was yet another way to indicate the company. But in most cases original flags do not have company markings.

Distribution of colours among foot regiments is generally unclear, we only know that in 1700 the 15 sets of flags manufactured in Moscow were red, 'sand', grey, blue, yellow, light crimson, light green, red yellow, and green. The colour of the flags in a regiment did not match uniform colour, for it is known that the same year new regiments in Moscow received uniforms of red, blue, brown, dark green, and green. Certain flag colours are known for a few regiments in the documents concerning manufacture of replacement flags in 1701–1705 – these are mentioned in the Appendix among uniform colours.

The flags of 1700 pattern were manufactured centrally in the Moscow Armoury Chamber (*Oruzheinaia palata*), it is the most widespread among flags that survived in Russia and in Sweden and was probably the most

62 N.G. Nikolaev, *Istoricheskii ocherk o regaliiakh i znakakh otlichiia russkoi armii. T. I. Velikokniazheskii i tsarskii periody* [Historical essay on regalia of Russia army. T. 1. Period of Grand Dukes and Tsars] (SPb, 1898).

63 Visit digitalmuseum.se to see all the captured Russian flags from Stockholm. The keywords for search in Swedish: 'Rysk fana'.

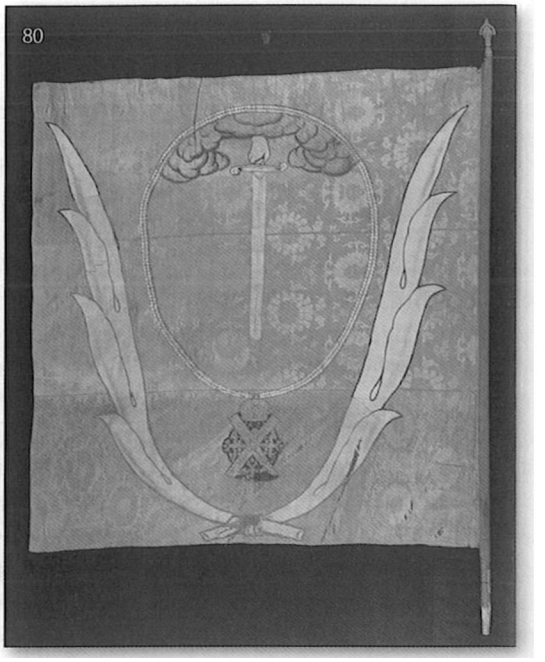
common pre-1712 pattern in the field infantry. However it was far from being the only one.

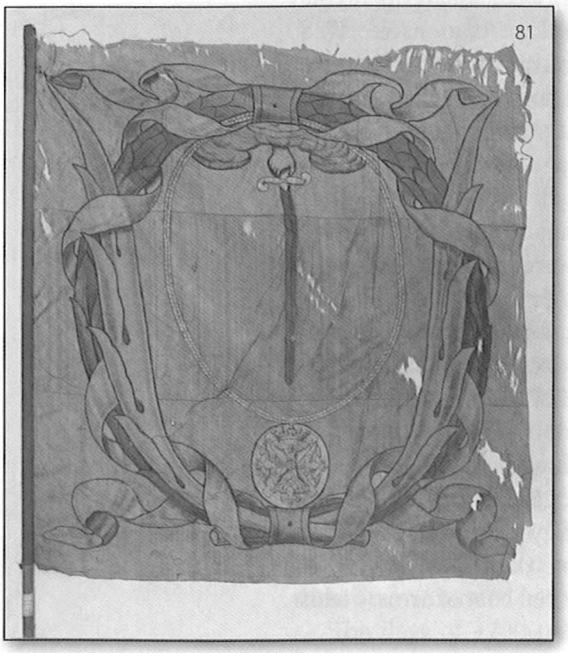
After the considerable loss of flags in 1700 regiments wanted resupply. There is no known regulation for line infantry colours between 1701 and 1712, so we can only refer to surviving items of unidentified units. Judging from them, flags were made not only in Moscow but also in other places (e.g. in Kazan) and out of cheaper textile – now linen instead of silk. Their design often bore a combination of the Petrine and pre-Petrine details (palm leaves, crowns, swords, St. Andrew's cross, stars, crucifix, inscriptions about who created the flag, when, and where). A set of 10 red linen flags stored in the Moscow Armoury bore from one to 10 stars otherwise resembling the 1700 pattern. An appearance of several infantry flags has been reconstructed in the colour section of this book based on available text descriptions from the 19th century.[64]

Dragoon company standards in the 1700s with slight variations bore palm leaves, St. Constantin's cross and a band with the motto 'Win with this sign'. White flags like in the infantry had a double eagle. The 1700 standards were manufactured in Moscow for two regiments (Moskovsky green, Kievsky black) and they are published here in the colour section. When 10 new dragoon units were raised in 1701, they were issued silk textile to make their flags on the spot in Pskov. The Troitsky Dragoons received white company colours. Remaining units had one of the following colours: red, reddish-yellow, light blue, green, cherry, black, and yellow; but we do not know which colour belonged to which regiment. Although a cross with leaves and motto seems to be the predominant dragoon pre-1712 pattern, some surviving items do not fit in this scheme: they have a double eagle or the Tsar's cipher on a coloured field and a fringe along the edges.

In 1712 a Senate decree prescribed that flags now were again manufactured centrally in Moscow; later the same year in the new establishment the flags were given five years term of service. The introduction of the 1712 model is common knowledge, although no regulation or decree was found so far to support this. These flags had new proportions (207 x 242 cm) and new design. White flags now bore the Tsar's monogram/cipher inside palm leaves. Company colours were now regiment specific and showed (just like Swedish flags) the coat of arms of the town or province that gave its name to a unit. When a place did not have a ready coat of arms, they selected an emblem from a compendium, *Simbola et emblemata*... (Amsterdam, 1705). Later via flags some such emblems were approved for a provincial coat of arms. Fields

64 *Opis Moskovskoi Oruzheinoi palaty* [Inventory of Moscow Armoury Chamber. Part 3. Book 1. Flags] (Moscow, 1884); Talyzin, I.D., *Opisanie artilleriiskogo zala dostopamiatnykh i ne dostopamiatnykh predmetov 1862 goda* [Description of the artillery hall of memorial and non-memorial items in 1862] (SPb, 2006); N.E. Brandenburg, *Istoricheskii katalog S.-Peterburgskogo Artilleriiskogo museia* [Historical catalogue of the St.Petersburg Artillery Museum] (SPb, 1877, reprint 2001); G.V. Vilinbakhov, 'Znamena rossiiskoi armii petrovskogo vremeni v sobranii Ermitazha' [Flags of Russian army of Petrine times in collection of Hermitage]. Proceedings of the [From Narva to Nystadt: Petrine Russia during Northern war 1700–1721. Compendium of materials of all-Russia conference, dedicated to 280 anniversary of Nystadt peace treaty] (SPb, 2001).





79. White flag also known as Regimental or Colonel's flag, 1700 infantry pattern. Courtesy of Army Museum, Stockholm

80. Company flag, 1700 infantry pattern. Courtesy of Army Museum, Stockholm. Note, this has a 'bag' – the flagstaff is inserted into it, not wrapped and nailed.

81. Company flag, 1700 infantry pattern. Courtesy of Army Museum, Stockholm. Unlike other flags from 1700 this bears wreath and a tape. Only two items of this type are known.

82. White flag of an infantry regiment, 1712 pattern. Courtesy of Army Museum, Stockholm.

of the company flags were either solid or consisted of quadrants, stripes, or crosses of varying and often exotic shape and colour – see the colour section of this book. In 1723 those regiments that had black fields were told to change them to green so that black flags remained distinctive for the Guards. When an infantry and a dragoon regiment bore the name of same province, their flags were similar in design and colour, but the dragoon flags were smaller.

While in most regimental records (see Appendix) flags mentioned after 1712 do match the 1712 pattern (see colour section), some units however show something different. For example, the Astrakhansky Infantry by 1715 had a variety of white, green, and red flags and standards, yet neither of them matched in colour the known 1712 pattern with red-yellow-red waving stripes. The Vyborgsky (Inglis) Infantry in 1713 received blue flags while the 1712 drawings show two different flags for this regiment but neither is blue. The Pskovsky Dragoons in 1720 had 'dark lemon' flags while per 1712 drawing it was to be blue.

Flags of the Guards are very well represented among surviving items, and at least they are attributed to particular regiments. In 1700 the regiments were issued two sets of flags. So called 'Sunday' or holiday flags were to fly on parades only; they showed an elaborate design with two figures of Mars and Neptune opening a curtain where Saturn in a boat teaches young boy to use oars – it all symbolised that Russia was then learning the military and marine trade. These flags remained in depot in Moscow and eventually were abandoned. The set of daily or campaign flags were brought to Narva where a good portion of them were lost – seven flags of Preobrazhensky and three of Semenovsky, including the white. The 1701 model replaced losses of the previous pattern with the addition of blue plant ornament over the black field for Preobrazhensky. Both models had six-pointed stars that indicated the number of a company (a white flag with no stars in 1st company, two stars in 2nd company etc. until 16 stars in the sixteenth). Another model followed in 1706 – again company flags for Preobrazhensky were black and for Semenovsky light blue; this model bore white-blue-red stripes, a rare case when military flag had what would later become recognisable national colours. Then in 1707 cavalry standard-like small flags were introduced for the Guards (as well as for the Ingermanlandsky and Astrakhansky Infantry) that campaigned mounted. Infantry flags were still carried by these regiments when on foot.

A special set of red or crimson flags was issued to the Guards at the start of the 1711 campaign against the Turks, the slogan on it read 'For the name of Jesus and for Christianity'. The Astrakhansky Infantry had two such flags, too. After 1711 we do not know what pattern the Guards carried until the end of the war; presumably the 1706 model, or at least it were black flags. When black flags were forbidden for the line regiments it was for the sake of not mixing up Guards with other troops.

Streltsy flags participating in the second Azov campaign, according to the 1696 roster of regiments, were of two general types.[65] The colonel's and

65 Manuscript department, Library of Academy of Sience (OR BAN), P I B N 2, Roster of personnel and materiele of streltsy regiments of Generals Gordon and Golovin, 1696.

lieutenant-colonel's flags as a rule represented rich ornamentation in paint or in embroidery with religious motifs, saints etc. Company colours were usually a plain cross over a colour field with a trim. In a few cases, however, the colonel's had a plain cross, too; in other cases company flags were as elaborate as the colonel's. Every flag had a shoulder belt for the ensign to support the staff, and a cover to protect the flag when rolled.

There is also a hypothesis that like the Guards in 1700, *streltsy* had two sets of flags – holiday flags and everyday flags. This assumption is based on the fact that two ex-Moscow *streltsy* regiments of Colonels Nechaev and Protopopov, which were defeated at Salaty, shortly beforehand had received 44 flags; it means that a 10 company unit received 22 flags – an excessive number by all standards. One can explain it if there were colonel's and lieutenant-colonel's flags and every company had an extra flag, total two. Out of those 44 flags the Swedes had captured 42. Among these 42, only 14 were plain flags with a cross, the others were richly decorated banners. It turns out that the two regiments in question in 1702 received flags that were in store in Moscow and that were left from the several disbanded Moscow *streltsy* regiments after 1698; some flags even bore the names of their former colonels.[66] Besides flags, both *streltsy* regiments received 2,152 pennants of varying size and design; these were described in documents as meant to fly on pikes, officers' or NCOs' half-pikes or even on *chevaux-de-frise* stakes. The Swedes captured 1,013 such pieces. There are also 13 items called *tchekhol*, silk cylinders with tails: these were either covers for officers' partizans or for some of the pennants. All this luxury was not carried by *streltsy* in that particular battle – it all lay packed in carts. But it gives an idea of how colourful the formations could have looked on parade.

One more observation about the collection of Salaty trophies – drum and lock covers, pennants and flags – is that they all represent species of pre-Petrine Russian art that is completely gone. If not for the occasional double eagles or cyrillic texts, today one could hardly tell these decorative motifs belonged to Russian culture. This is yet more evidence of a dramatic change brought by Tsar Peter even in superficial things such as ornaments.

Both infantry and dragoon flags always had finials and covers. The covers made of wool cloth most often are mentioned as red, sometimes green. In April 1704 Major-General Peter Apraksin started a campaign with underequipped infantry that had neither cold steel nor flags, so he waved empty flag covers so that the enemy was beware of his force.

Finials were cast bronze or iron. The bronze 1700 pattern bore a St. Andrew cross with double eagles; the regimental colour had a gilded finial, company colours bronze covered with white tin; after 1720 finials in all companies were gilded. An astonishing find was made in 2015 in Narva when an amateur archeologist found two finials broken from their staves; the flags as trophies travelled to Stockholm where they are stored now in the Army Museum, but the finials remained in the soil on the spot of the battle for 315

66 See: chapter 'Mystery of Saladen' in Hoglund, Salnas, Bespalov (2006); V. Velikanov, 'Regimental property of streletsky regiments of Nechaev and Protopopov, lost in battle at Salaty, 1703' in *Staryi Zeughaus*, 2013, 2 (52), pp. 3–13.

years. Other species of finials were flat iron, sometimes with a slotted crucifix, or brass with a superimposed St. Andrew's cross.

Tassels and cords were not common and were mentioned for dragoons and guards, but not for the infantry. Despite the impressing dimensions of both flag and staff, the infantry did not use bandoliers to support the butt of the staff. *Streltsy* did use it and a few dragoon regiments too (dragoon flag staves in this case had a rail to attach a bandolier hook), but ensigns in line infantry had to carry the huge colours in their hands.

Grenadiers and horse grenadiers traditionally did not have flags, although in 1715 Weide's Grenadiers received two flags with a golden fringe for their two battalions.

According to the 1716 drill manual, flags were grouped in four in the centre of battalion. In the firing line the flags stood behind the centre, drummers and band behind them. When parading in column, flags marched between the second and third companies. Flags equalling the number of companies was the ideal situation, but sometimes it was not the case, for example when captured flags weren't replaced timely or when new companies were introduced and wanted issue of new flags.The status of the flag was somewhat dual. It was a piece of regimental property, issued every five years per 1712 establishment just like halberds or drums. Regiments often gave away their old flags to the arsenal; other regiments, in return, received what flags were available there. The flags' design and colours before 1712 did not have any connection to a specific regiment. Thus the flag was merely piece of recoverable equipment – this changed only in Emperor Paul I's reign in 1790s, when a flag in the Russian army obtained the status of a regimental sacred thing, kept forever within the unit; losing it meant disgrace.

83. Finial of an infantry flag, 1700. Courtesy of Army Museum, Stockholm.

On the other hand, Peter's Military Code of 1716 said a lot about honouring of the flag. A regiment always presented arms when the ensigns brought the flags from the colonel's quarter to the formation. Setting out from quarters or arriving at quarters was always done under flying flags and with a band playing, unless the colonel thought the weather was prohibitive or the men too exhausted. When the flag was flying, officers were to march in ranks on foot carrying their weapons and not wearing their cloaks. Lowering of flags was only allowed when saluting the monarch. The military oath was given in front of the flag; when someone who was suspect and interrogated was then allowed to return with his name cleared, his rehabilitation was done by covering him with the flag. Flags were not flying all the time. On the march, when the colonel gave the order to roll and cover flags, soldiers took their muskets off their shoulders and hung them on a sling, the drums stopped playing tunes and only one drum per battalion gave rhythm. Officers gave their polearms to servants, and were allowed to put on cloaks and to mount their horses.

A special attitude towards flags can be found before the Code was issued. In the battle of Narva 146 flags (more than half of all army flags!) were lost to the Swedes, however many were rescued, too. Ensign Izmailov of the Moskovsky

84. St. Andrew badge in oval painted on a 1700 flag. (Author's photo)

Regiment carried his flag through the battle and back to Novgorod; in reward he was promoted to lieutenant in the Semenovsky Guards.[67] In the unfortunate battle of Holowczyn, regiments of General Repnin had to retreat and the investigation that followed revealed some details. A question was put to the accused general: in the retreat did the drums beat and did the flags fly as is common in military tradition? His response: the flags were not flying in order not to tear them on branches during a march in a forest; also, some officers took the banners off the staves on their own initiative, without order from above.[68] This last detail shows that ensigns of the Rostovsky Regiment, who put folded banners in their pockets and carried empty staffs, were prepared to save their flags in a critical situation and behaved in accordance with the requirements of Ensigns. These were written down in Weide's 1698 'regulation' and later in the 1716 Code: when in a dangerous situation in retreat, the ensign must tear the banner off the staff and hide it or wrap it around his body thus saving himself and the flag.

The ensign (*praporschik*) was a junior officer rank; he carried the flag 'in public' and in battle where, the Code said, he had to hold the flag in his left hand and defend himself with sword in right hand, and had better be killed than abandon the flag. The under-ensign (*podpraporschik*), an NCO, carried the flag on the march and assisted the ensign in battle.

Every company also had a small flag (a Fourier pennant in the infantry and a quartermeister pennant in the dragoons): it served to mark the quarters of a company in the camp or village. The banner was supposedly square in shape and was often of just green, or green and red, or green and yellow, and bore the name of a regiment and number of a company.

Music

The infantry had 24 drums in a 12 company regiment in 1700 and later 16 drums in an eight company regiment, that is two drums per company. The drums were wooden as a rule – the barrel assembled of wooden planks and covered with painted canvas. Drum decoration remains uncertain. The default version depicted in Viskovatov had a green barrel with painted medallions as on flags, and red bands. The *streltsy* drums captured by the Swedes at Salaty were of two types. The few bigger ones (about 52 cm in

67 *Iz proshlogo. Istoricheskie materialy Leib-gvardii Semenovskogo polka* (SPb, 1911), p. 21.
68 *Trudy IRVIO*, T. 1, p. 149.

Uniform Plates by Nikolay Zubkov

See Colour Plate Commentaries for full captions

The army of 1700–1703: Dragoon, Moskovsky Dragoons; soldier, Novgorodsky Infantry; private, *streltsy* regiments.
(Illustration by Nikolay Zubkov, © Helion & Company)
See Colour Plate Commentaries for further information.

The army of 1704–1707: fusilier, Yaroslavsky Infantry; grenadier, Azovsky infantry; sergeant, Vladimirsky Infantry.
(Illustration by Nikolay Zubkov, © Helion & Company)
See Colour Plate Commentaries for further information.

The army of 1708–1711: Cannonier, Artillery regiment; NCO, Khlopov Horse Grenadiers; pikeman.
(Illustration by Nikolay Zubkov, © Helion & Company)
See Colour Plate Commentaries for further information.

The army and navy 1712–1721: Sailor; soldier, Belgorodsky Infantry; dragoon, Sibirsky Dragoons.
(Illustration by Nikolay Zubkov, © Helion & Company)
See Colour Plate Commentaries for further information.

Irregulars and non-combatants: Cossack; non-combatant; Bashkir

(Illustration by Nikolay Zubkov, © Helion & Company)

See Colour Plate Commentaries for further information.

Flags, 1700

The trophy collection of the Army Museum in Stockholm holds numerous Russian flags captured by the Swedes, mainly in 1700 at Narva or 1703 at Salaty. While the collections of Russian flags in Russian museums – principally the Hermitage, Kremlin and Artillery Museum – are no less precious, they so far cannot compete in terms of accessibility or in preservation of items. Photographs from the Army Museum, Sweden. Reproduced with permission.

1. Flag of Moscow ***streltsy*** regiment Colonel Krovkov, 1695; issued to ***streltsy*** regiment of Nechaev or Protopopov in 1702 and captured from them in 1703.

2. Company colours of unspecified ***streltsy*** unit.

3. Company colours of unspecified ***streltsy*** unit.

4. Life Guards, 1700: Preobrazhensky 2nd company

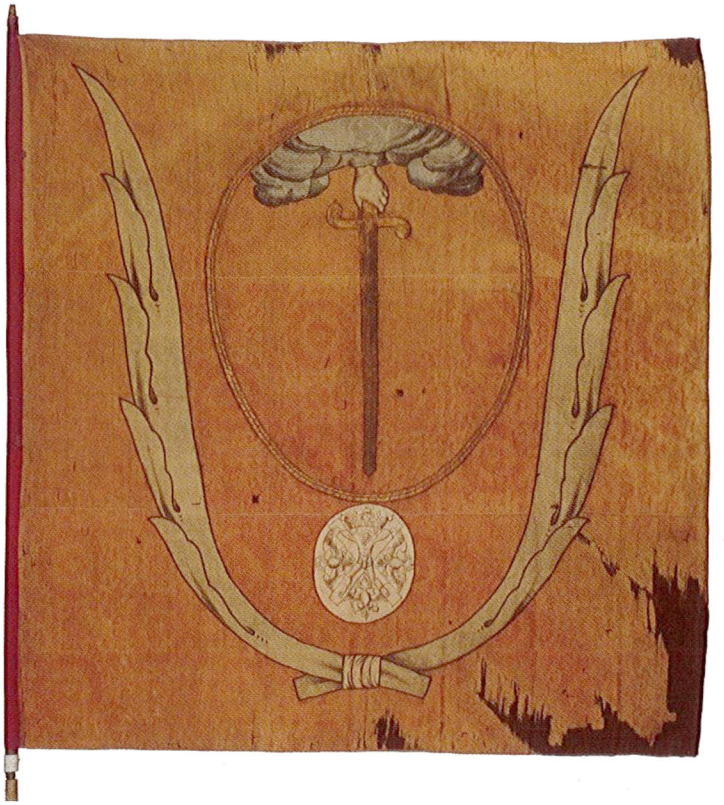
5. Life Guards, 1700: Semenovsky regimental or white flag.

6. Life Guards, 1700: Semenovsky 3rd company

7–10. Infantry, 1700: white and company flags of unspecified line regiments.

8. See above

9. See above



10. See above

11. Dragoons, 1700: white flag of Moskovsky (Colonel Goulits') Regiment.

12. Dragoons, 1700: company flag of Moskovsky (Colonel Goulits') Regiment.

13. Dragoons, 1700: white flag of Kievsky (Colonel Shnevents') Regiment.

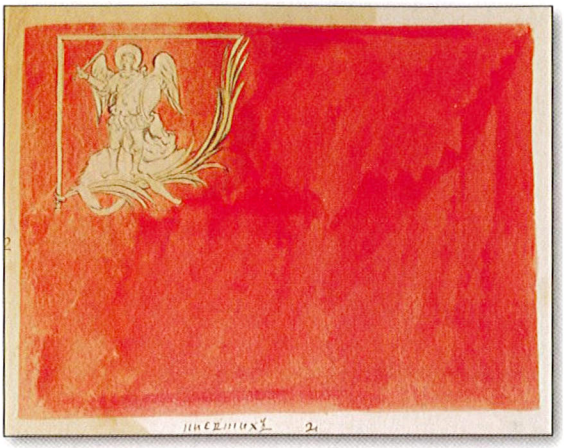
14. Dragoons, 1700: company flag of Kievsky (Colonel Shnevents') Regiment.

Flags – Period Drawings

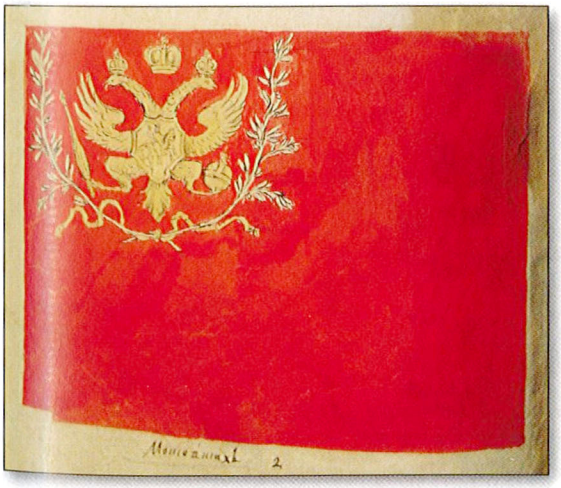
Flags with provincial coat of arms were introduced in 1712. Their earliest depiction published here is undated but supposedly dates to around 1712–13 because it mentions Inglis – a colonel's name that changed to geographical one (Vyborg) in 1712. Often the same geographical name was given to both an infantry and a dragoon regiment (for example, Moscow gave its name to the Moskovsky Infantry and Moskovsky Dragoons), hence both units were to have similar design, save their size. The document includes two different versions of flags for the Inglis (Vyborgsky) Infantry and Leib-regiment – this may be because one was carried in fact and another was prescribed.

Courtesy Kirill Tatarnikov from the Russian State Military History Archive (RGVIA), who has published this material: K.V. Tatarnikov, 'Znamena i gerby polkov rossiiskoi armii tsarstvovanii Ekateriny I I Petra II (1727–1730)' [Flags and coat of arms of the regiments of the Russian army during the reigns of Catherine I and Peter II (1727–1730)] in *Istoriia voennogo dela: issledovaniia i istochniki* [History of military science: research and sources], 2012. T. I. pp. 51–215. <http://www.milhist.info/2012/04/22/tatarnikov> (accessed 8 October 2017)

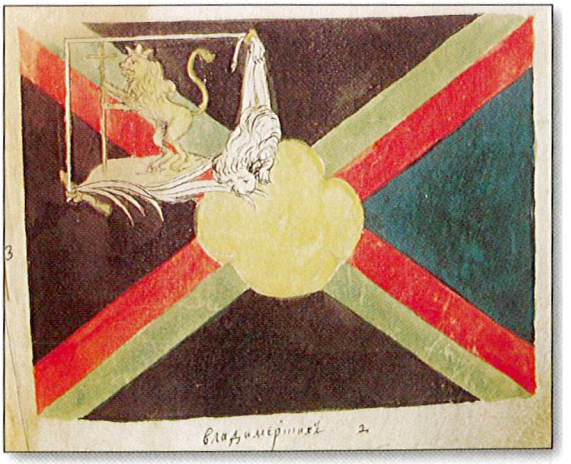
White or regimental flag of infantry and dragoon regiments



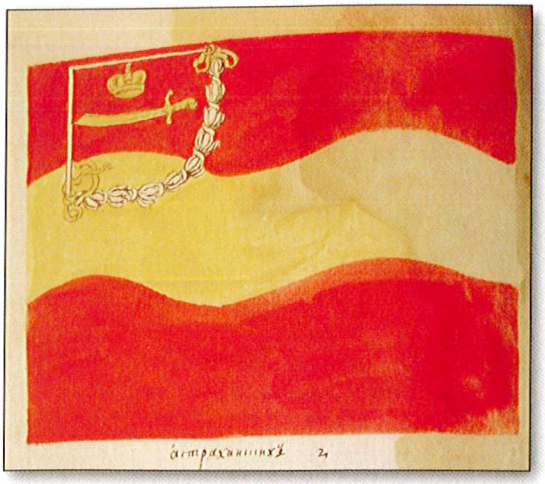
Kievsky Infantry and Dragoons



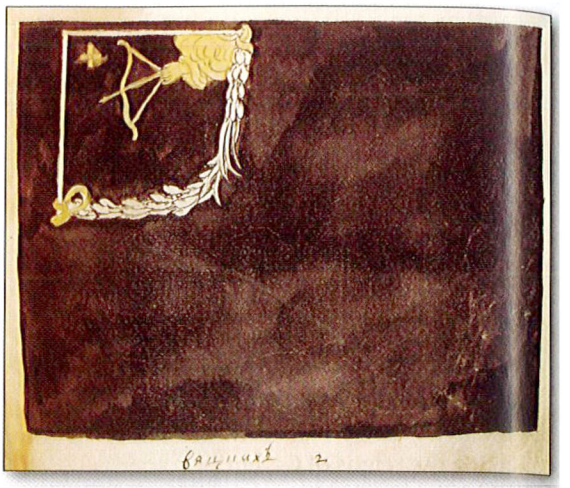
Moskovsky Infantry and Dragoons



Vladimirsky Infantry and Dragoons

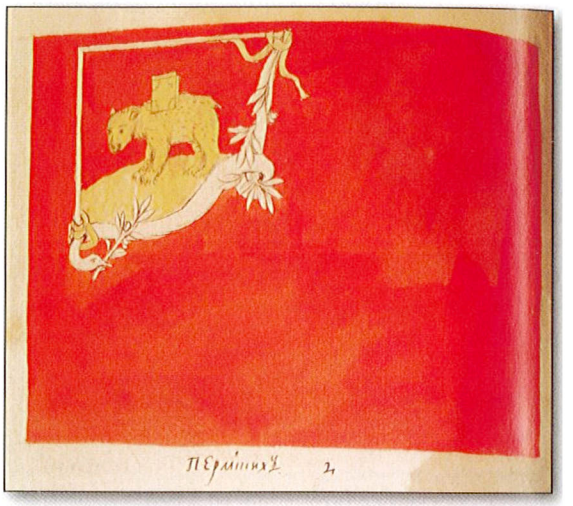


Astrakhansky Infantry and Dragoons

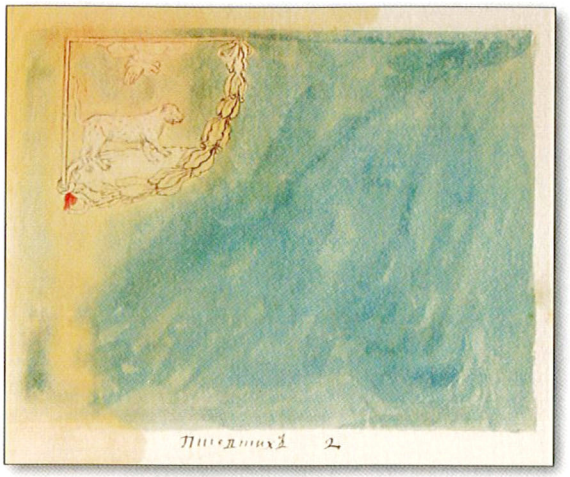


Vyatsky Infantry and Dragoons

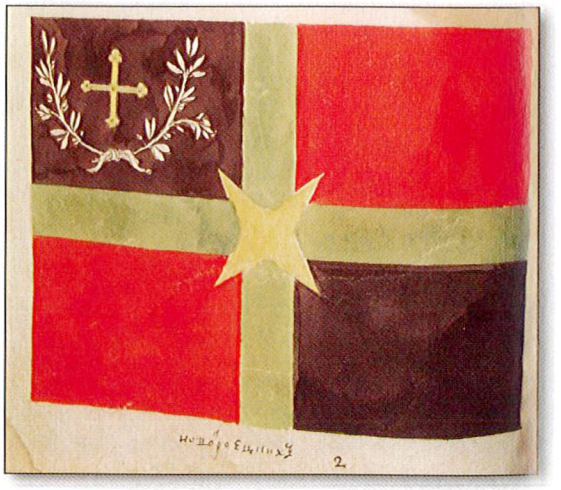
Novgorodsky Infantry and Dragoons



Permsky Infantry and Dragoons

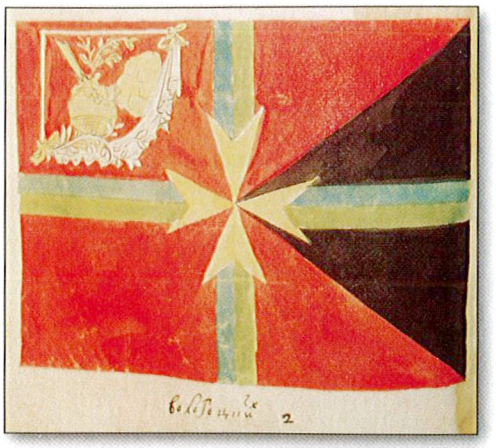


Pskovsky Infantry and Dragoons



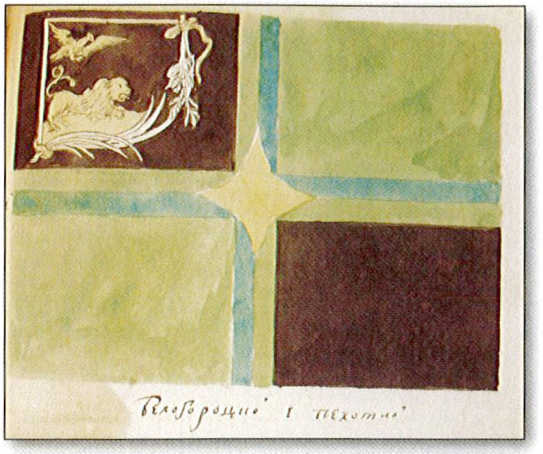
Novotroitsky Infantry and Dragoons

Troitsky Infantry and Dragoons



Vologodsky Infantry and Dragoons

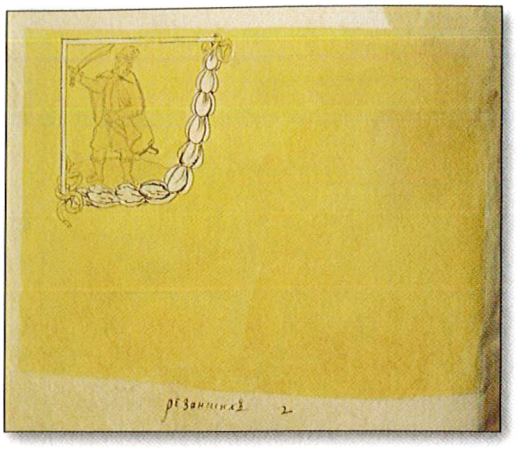
Arkhangelogorodsky Infantry and Dragoons



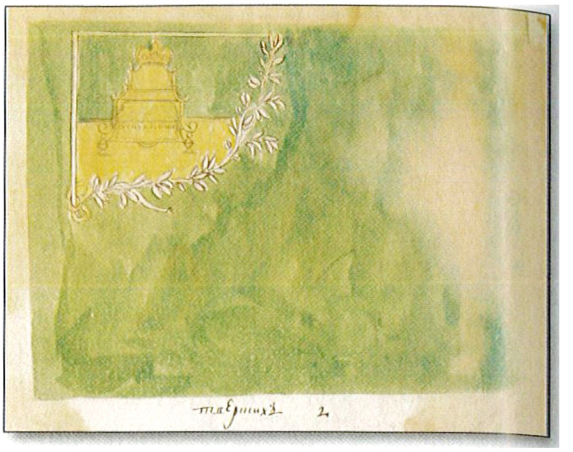
Belgorodsky Infantry

Ingermanlandsky Infantry and Dragoons

Nizhegorodsky Infantry and Dragoons



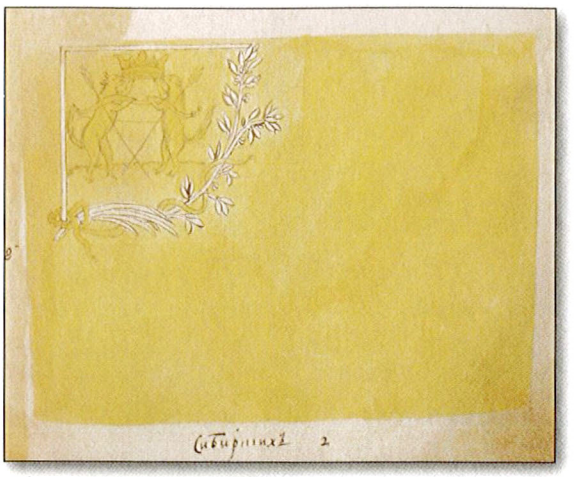
Ryazansky Infantry and Dragoons



Tverskoy Infantry and Dragoons

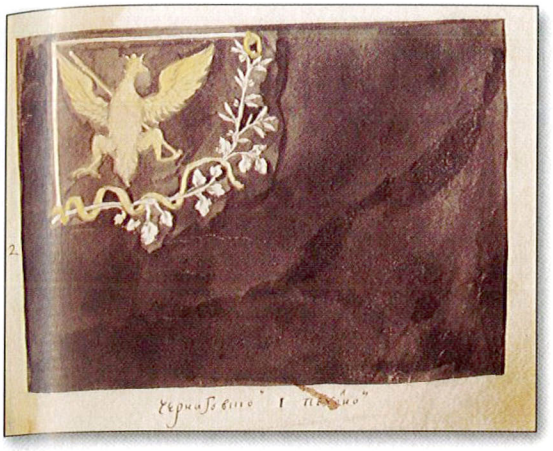
Kazansky Infantry and Dragoons

Rostovsky Infantry and Dragoons

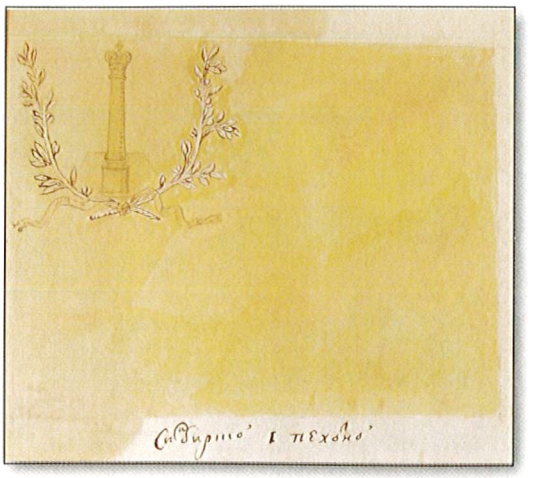


Sibirsky Infantry and Dragoons

Yaroslavsky Infantry and Dragoons



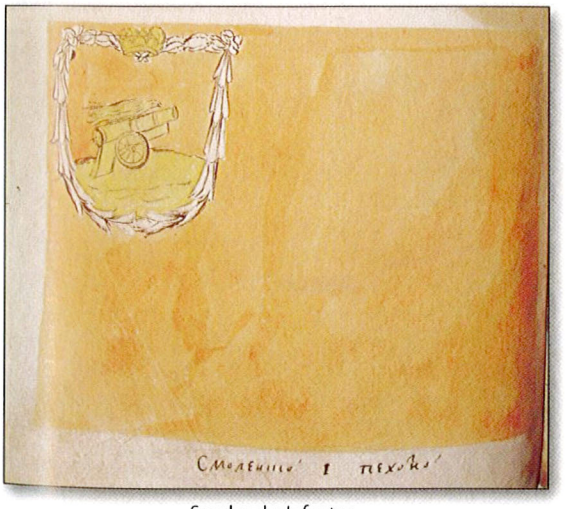
Chernigovsky Infantry



Simbirsky Infantry

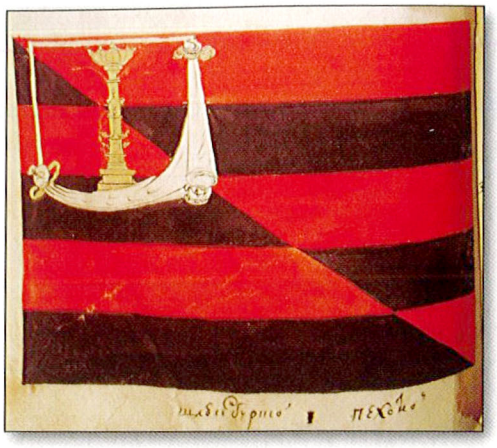
Voronezhsky Infantry

Kargopolsky Dragoons

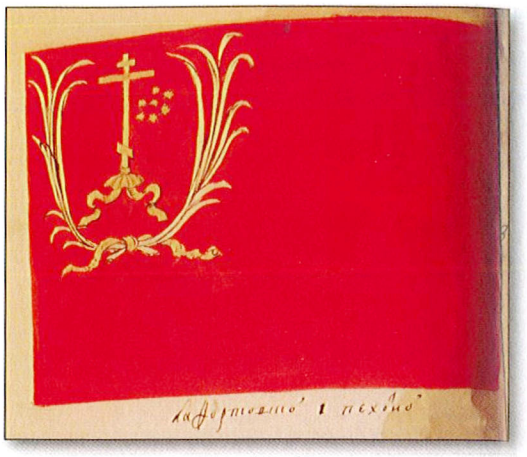


Smolensky Infantry

Tobolsky Infantry and Dragoons



Shlisselburgsky Infantry



Lefortovsky Infantry

Nevsky Infantry and Dragoons

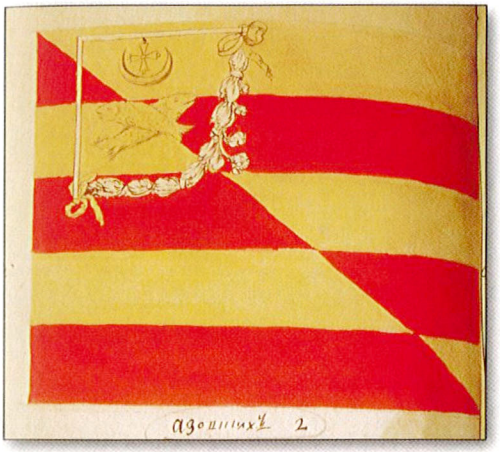
Saksonsky Infantry

Narvsky Infantry and Dragoons

Sankt-Peterburgsky Infan-try

Galitsky Infantry

Butyrsky Infantry

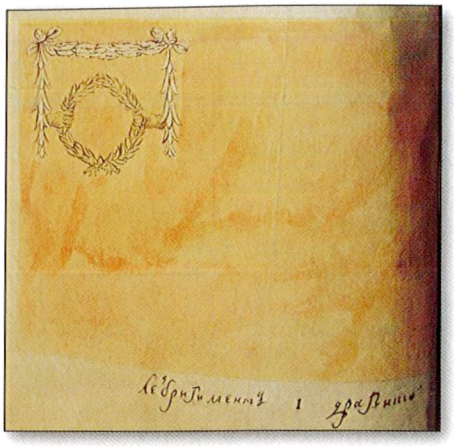


Azovsky Infantry and Dragoons

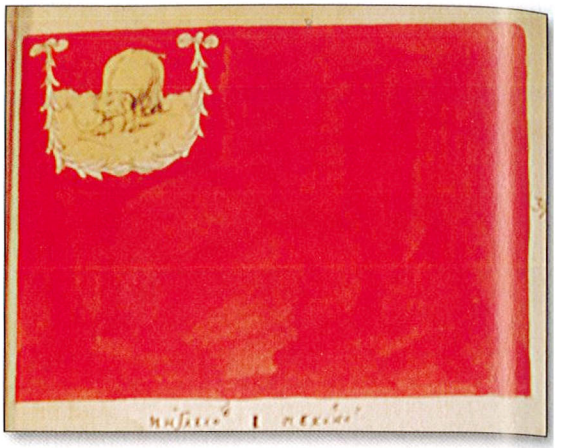
Yamburgsky Dragoons

Velikolutsky Infantry and Lutsky Dragoons

Koporsky Infantry

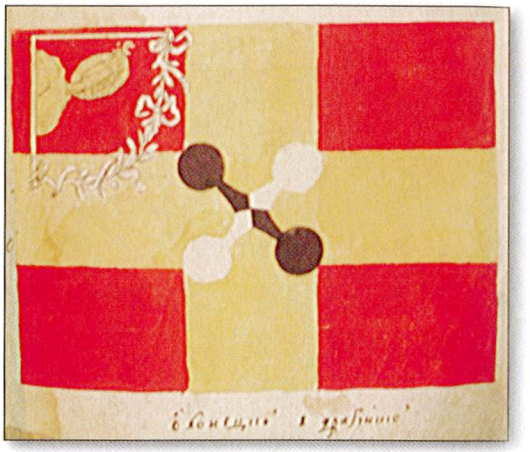


Leib-regiment Dragoons

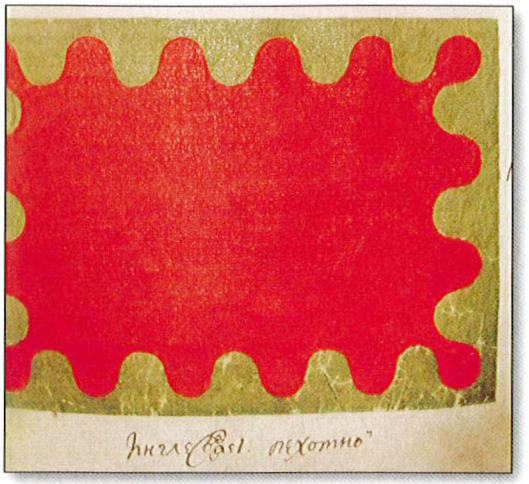


Vyborgsky Infantry

Leib-regiment Dragoons



Olonetsky Dragoons

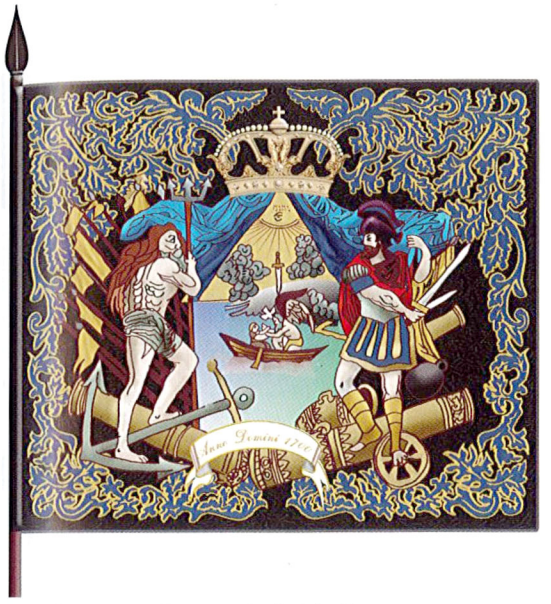


Vyborgsky Infantry

Flags – Graphic Reconstructions by Lesley Prince

Flags of the Guards are relatively well known from attributed original pieces and from secondary pictures based on them. Some surviving flags of unknown regiments, however, were only described in 19th century inventories and have not been published before; some were reconstructed here according to texts or in a few cases to photos. Artwork by Lesley Prince, © Helion & Company 2018.

Preobrazhensky Life Guard Regiment



Pattern 1700, 'holiday' flag

Pattern 1701, regimental flag

Pattern 1701, 3rd company flag

Pattern 1706, company flag

Pattern 1707, standard for mounted service

Pattern 1711, regimental flag on occasion of War with the Ottomans

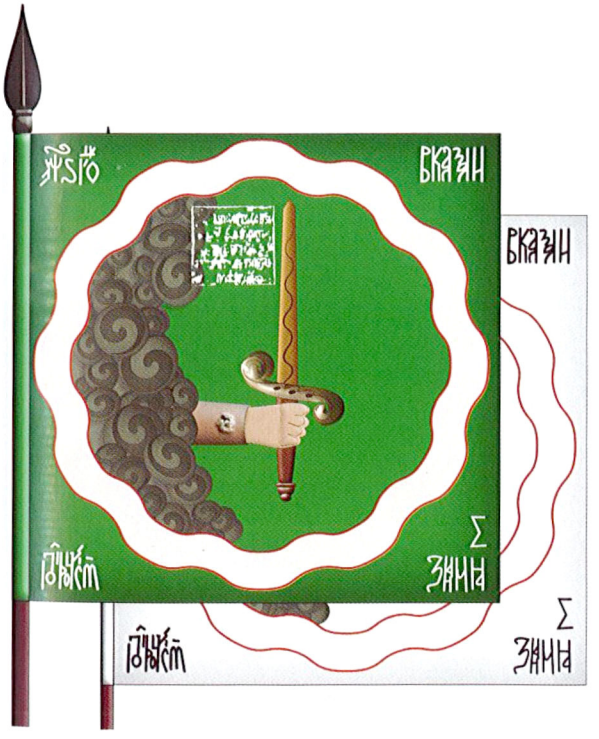
Flags and Standards of Unspecified Regiments

Infantry flag, per original from the State Hermitage

Infantry flag created in 1705, per 1883 catalogue of Artillery Museum

Dragoon standard, per 1862 inventory of St.Petersburg Arsenal

Dragoon standard, per 1883 catalogue of the Artillery Museum



Infantry flag created in Kazan in 1706, per 1883 catalogue of Artillery Museum. This design was typical for soldier regiments in 17th century

Dragoon standard, per original from the State Hermitage

Contemporary Items

See Colour Plate Commentaries for full captions

B

C

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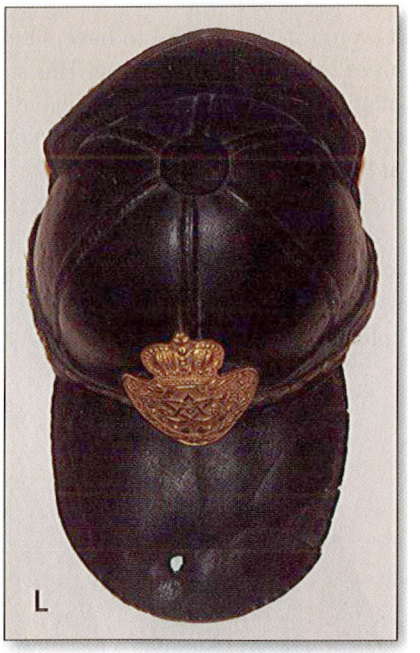
L

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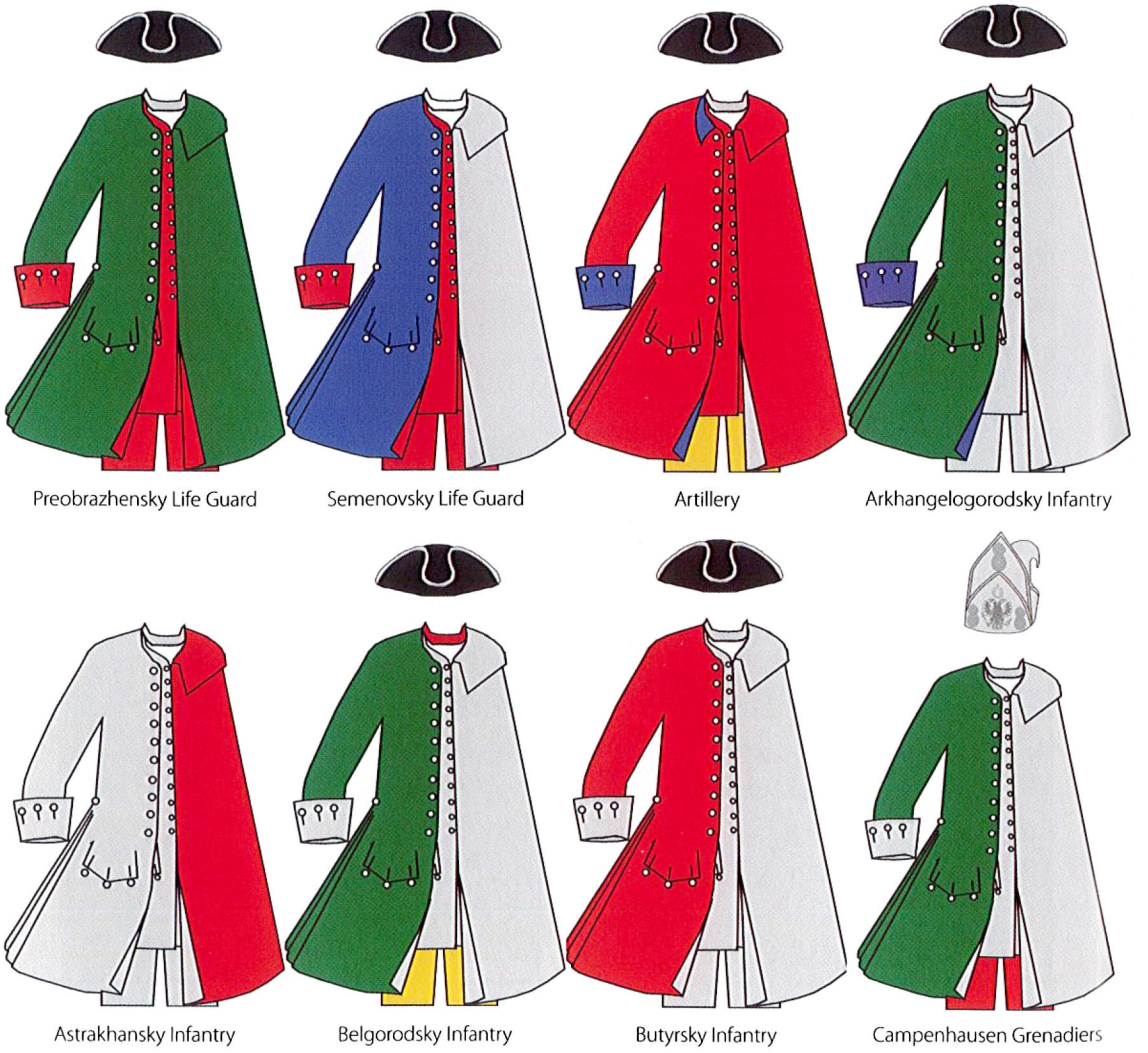
N

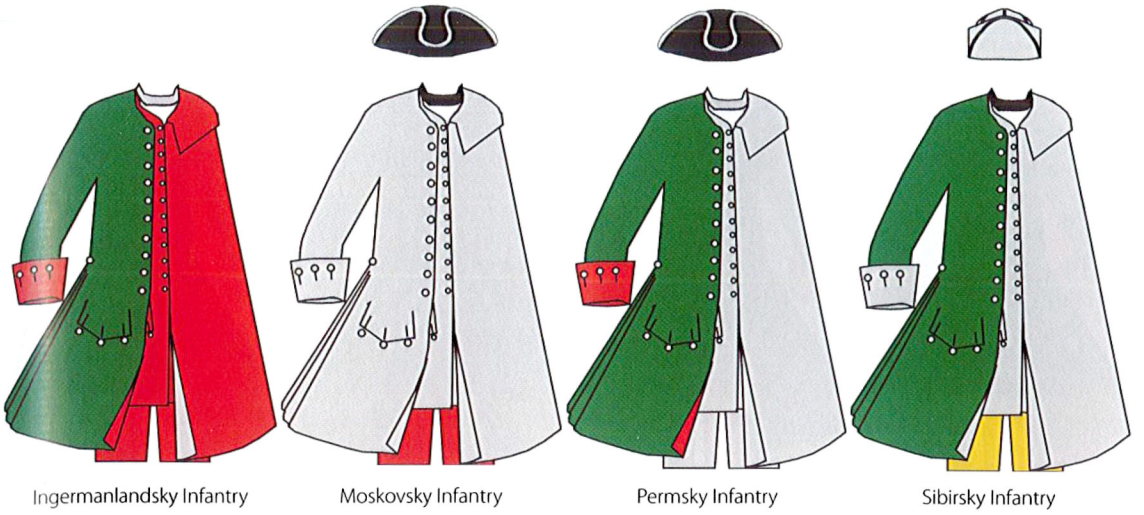
O

Uniform Colours 1708–1709

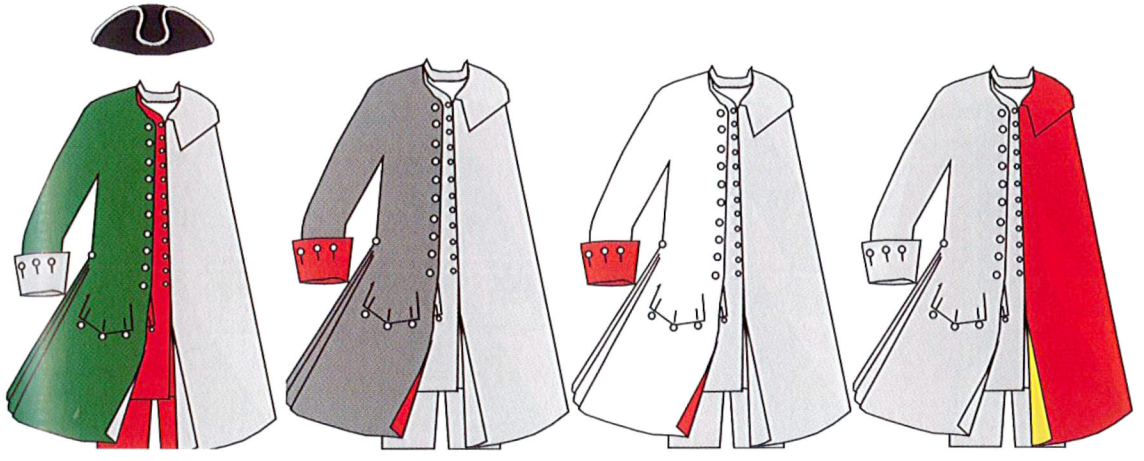
See Appendix III for full captions

It would be wonderful to have data about all possible regiments for all war years, but unfortunately a lot of information is lacking. This selection of uniform colours from the Poltava period represents how many gaps are there in the available data. This collection only includes regiments for which at least some colour information is available. Where colour is unidentified in sources, the detail is left pale grey. Type of headgear – hat, grenadier cap or *karpus* – is indicated where known. One may use imagination and make reasonable guesses as to the shades of obscure details. For example, we may speculate that facings – cuffs, collars and lining – most probably were red. Neck cloths were red, black or white. Stockings were red, blue or grey. Coats were green, blue, red or white. Cloaks were red or green. Trousers were red or leather. Waistcoats were red, green or whatever was the coat colour of the previous issue. More colours for other years are in the Appendix. Illustrations by David Wright, © Helion & Company 2018

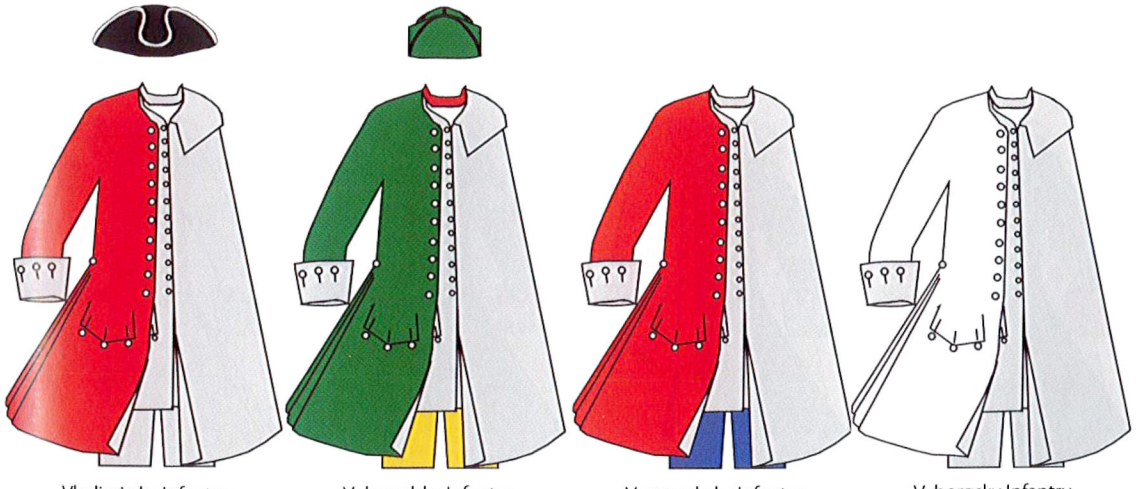




Ingermanlandsky Infantry | Moskovsky Infantry | Permsky Infantry | Sibirsky Infantry



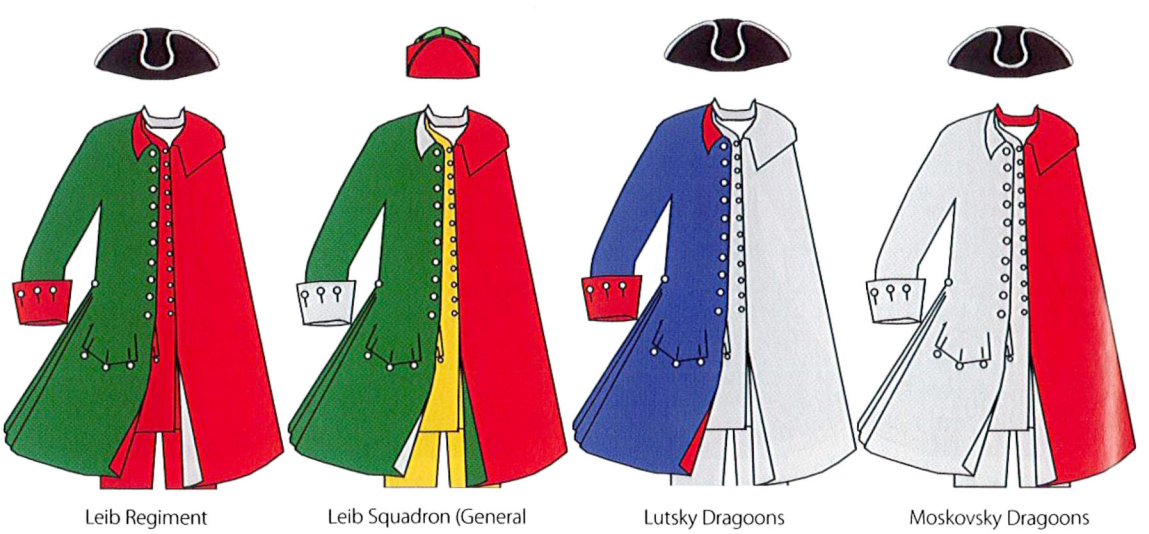
Smolensky Infantry | St. Petersburg Garrison | Troitsky Infantry | Ustyuzhsky Infantry



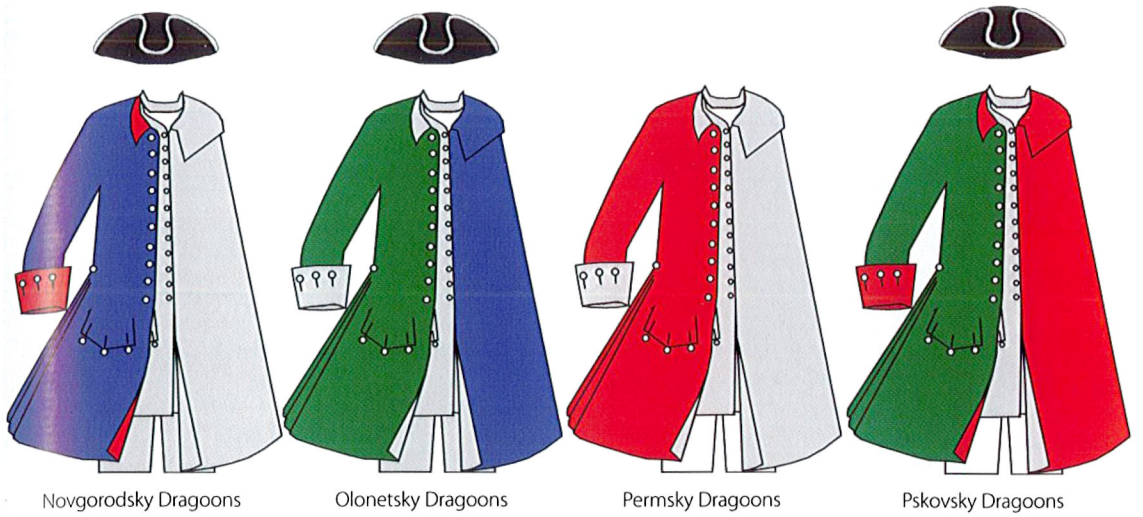
Vladimirsky Infantry | Vologodsky Infantry | Voronezhsky Infantry | Vyborgsky Infantry

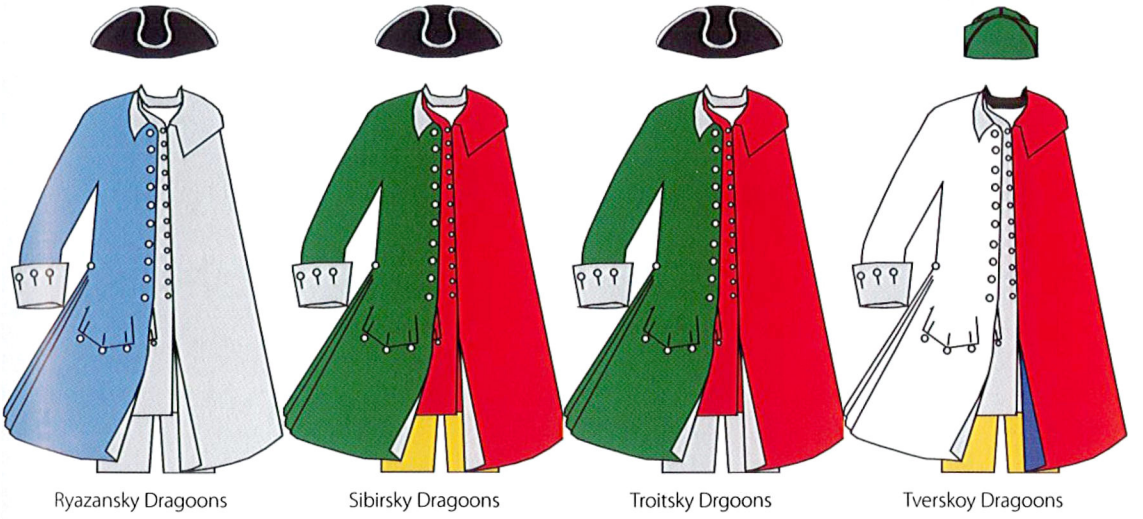
Yamburgsky Infantry | Yaroslavsky Infantry | Arkhangelogorodsky Dragoons | Astrakhansky Dragoons

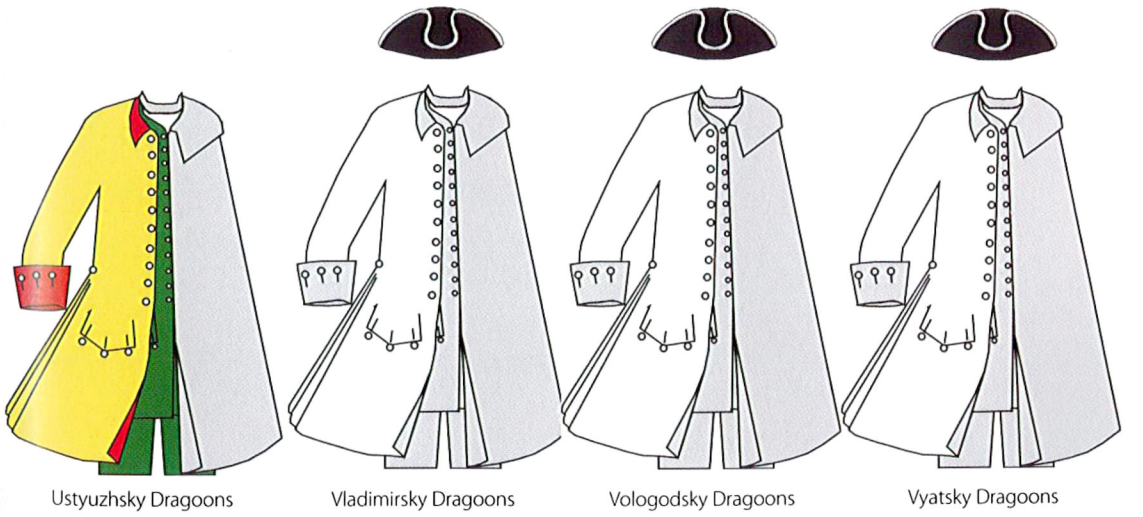
Ingermanlandsky Dragoons | Kargopolsky Dragoons | Khlopov Dragoon Grenadiers | Kropotov Dragoon Grenadiers



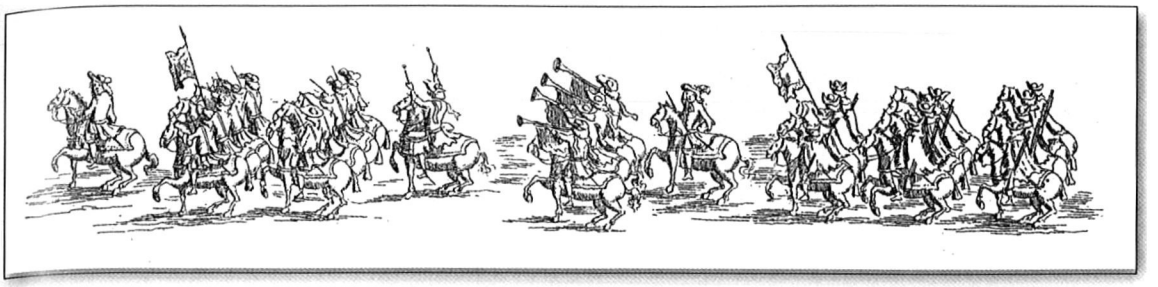
Leib Regiment | Leib Squadron (General Squadron) | Lutsky Dragoons | Moskovsky Dragoons


Novgorodsky Dragoons
Olonetsky Dragoons
Permsky Dragoons
Pskovsky Dragoons


Ryazansky Dragoons
Sibirsky Dragoons
Troitsky Drgoons
Tverskoy Dragoons


Ustyuzhsky Dragoons
Vladimirsky Dragoons
Vologodsky Dragoons
Vyatsky Dragoons

The Battle of Poltava. 1717–1718. Louis Caravaque (1684–1754). Photograph by Konstantin Sinyavsky, Svetlana Suetova, Vladimir Terebenin.
Photograph © The State Hermitage Museum, St. Petersburg, 2017.



85. Dragoon troop with kettle drummer and trumpeters. Fragment of Persian Embassy entering Moscow in 1712, 1713. (Pieter Picart (1668–1737))

height and diameter) were so called colonel's and lieutenant-colonel's drums; these were richly painted in gold with double eagles and plant ornaments. Others were company drums smaller in size (roughly 40 cm high and broad) painted in yellow (or was it white?) and red triangles with red bands. Every drum was equipped with a leather sling and cloth cover to protect it from the elements. The *streltsy* drum covers from Salaty boast multicolour ornamentation and elaborate stitchwork; regular infantry drums had plain covers of green and red wool as a rule.

The fife was initially issued to all infantry as a part of the regimental band. After 1712 fifes were to remain in Grenadier regiments only, thus emphasising their elite status; however one still finds fife in some line infantry in the late 1710s.

Kettledrums were issued to dragoons, usually one pair to a regiment. Sibirsky received the instruments in 1701, other regiments received theirs in 1706. The drums were brass and had a cloth cover decorated with laces. A surviving pair of silver kettledrums now in the Suvorov State Memorial Museum has a curious history: it served in Swedish troops in 1702 at Kliszow; in 1709 it was taken by the Russians at Poltava and given to the Leib-Squadron (this elite unit of Menshikov's had five pairs of kettledrums in 1719). The squadron was elevated to horse life guards (raised in 1730) where the trophy served until 1918.[69] Another pair of trophy Swedish kettledrums is known to had been given to the Novgorodsky Dragoons after Poltava; Tverskoy captured one pair in March 1707 in Poland.

Besides cavalry, there were kettledrums in the artillery! In 1706 the head of Ordnance James Bruce ordered production of a flag for the Artillery regiment (a yellow gun on a red carriage with a black eagle above, on a white silk field) and a kettledrum chariot. This was to be a merely ceremonial piece, of course. The kettledrum covers were made of white silk, bore a painted black eagle under a yellow crown and had a white, blue, and red silk fringe.[70]

Dragoons also had trumpeters, two per regiment. Their brass trumpet had a cord with tassels and sometimes with a banner. In the late 1710s some units replaced trumpets with *waldhorns*.

Whilst trumpets and kettledrums were ceremonial musical instruments, dragoons' signallers were drummers, one (before 1712) or two per company.

69 A. Nikitin, 'Poltavskaia regalia' in Oriol, 1991, 1, pp. 15–17.

70 A.R. Kruglova, E.V. Smolenchuk, 'Eshche raz ob artilleriiskom znameni 1745 goda' [Once again about the artillery flag of 1745] in Sbornik issledovanii i materialov VIMAIViVS [Compendium of studies and materials of VIMAIViVS] (SPb, 2010), Issue IX, pp. 381–382.

86. Big or regimental drum and smaller company drum of a ***streltsy*** regiment, captured in Salaty, 1703. Courtesy of Army Museum, Stockholm.

87. Drum covers captured in the same battle and probably belonging to the same drums. Courtesy of Army Museum, Stockholm.

The drum was traditionally an infantry instrument and it emphasised that this arm was intended to be mounted infantry.

Regimental music bands played on parades and other military ceremonies. They were professional musicians, many were hired foreigners who were obliged to train local boys, often soldiers' sons. In the 1700s bands had 24 men who played fife and *sipovki* – Russian native wooden trumpets later replaced with the Western oboe (*hautbois*) of the same nature.

Per 1712 establishment an infantry regiment had a band of nine and a dragoon regiment eleven oboists where one of the musicians was a foreigner. Oboist was the general name for all musicians in the band: the instruments in an infantry band included five oboes, two trumpets and two *waldhorns*.

The Guards of course stood out in this respect. In 1702 Preobrazhensky had 32 *sipovki* and 40 drums, Semenovsky 16 *sipovki* and 35 drums; in 1706 Preobrazhensky had four bands; by 1716 the first regiment had 43 and the second 30 musicians.

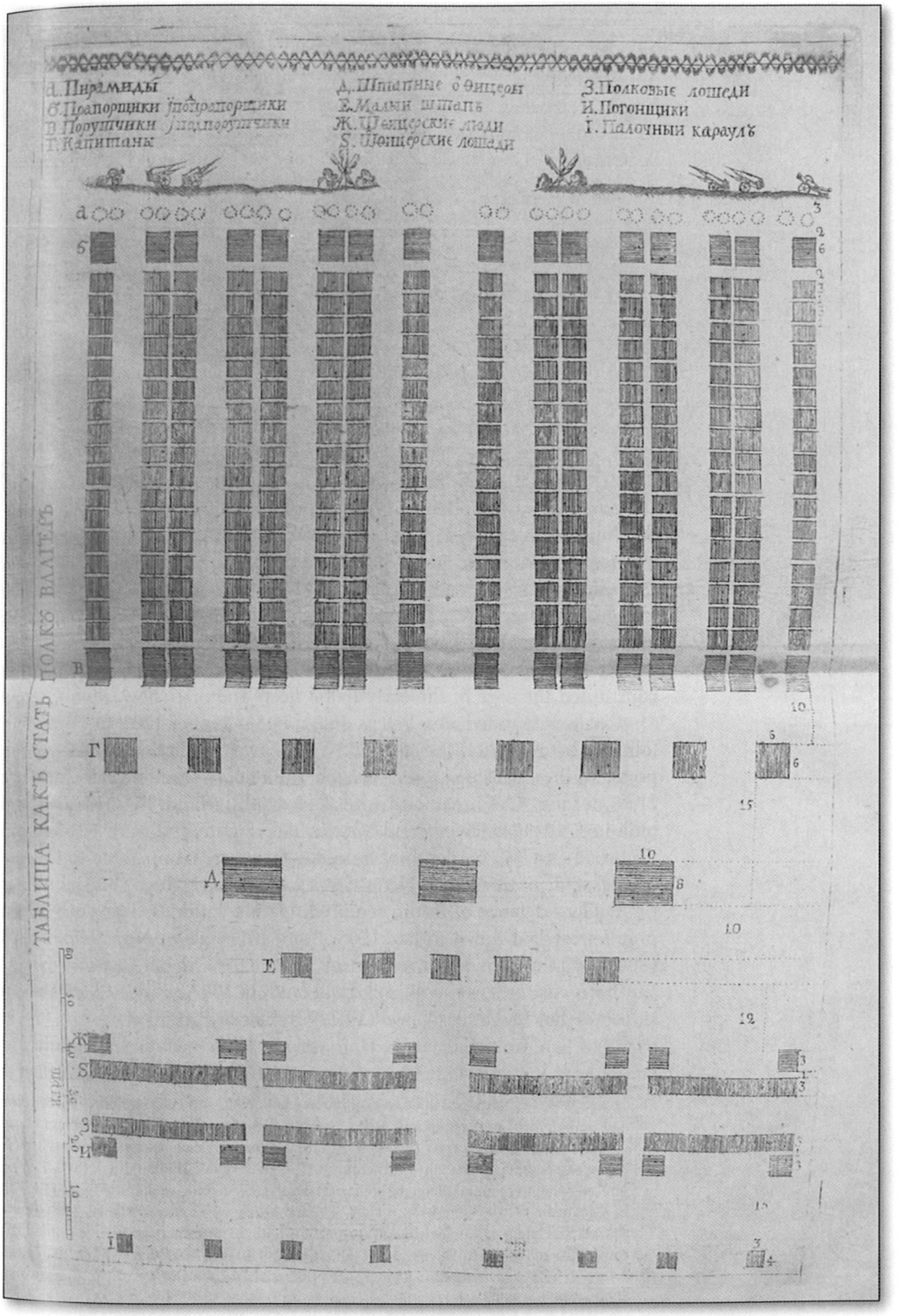
Camp and Train

Tents issued for other ranks were made of twofold linen and had a plain A-shape with flat front and rear; whether they had coloured flames on the roof is unclear. A tent accommodated six men, and per 1712 establishment a company had 25 tents for men and four bell tents, 36 muskets in each. Officers were to pay for their tents; the Military Collegium promised to provide three exemplary tents for senior officers, captains and lieutenants. Whether those samples arrived and what they looked like we do not know; in one of the regiments, officers' tents were green. Besides tents for men and bell tents for weapons there was a tent or shelter for the regimental church and a shelter for drums.

The regimental train included ammunition carts (a cartridge caisson on two wheels with two horses, one per company before and two after 1712; two regimental artillery caissons), four-wheel and four-horse baggage wagons (three before and six after 1712, per company), one pharmacy cart, a chancellery cart, a church cart and a cashier's cart. Besides this there were wagons for transporting *chevaux-de-frise*. In 1718 the Military Collegium prescribed that all the regimental vehicles were painted in red; one side bore the name of the regiment and the company number, the other side bore a coat of arms or nothing when the 'model of emblem had not arrived'.

Regiments were issued tools that were used either by all men or by regimental skilled craftsmen. According to the 1712 establisment, an infantry regiment had 200 hatchets, 80 iron spades in leather holsters and 80 picks. In a dragoon regiment literally all men carried tools: 800 hatchets, 100 spades and 100 picks. There were also joiners' and blacksmiths' tools for regimental craftsmen.

88. Right: Plan of a field camp of an infantry regiment as per 1716 regulation, from top down: bell tents, ensigns, lieutenants, captains, senior officers, staff, officers servants, officers horses, regimental horses, train drivers, convicts guard.


а. Пирамиды
б. Прапорщики ї подпрапорщики
в. Порутчики ї подпорутчики
г. Капитаны
д. Штапные офицеры
е. Малыи штапъ
ж. Шеицерские люди
ѕ. Шеицерские лошади
з. Полковые лошеди
и. Погонщики
і. Палочныи караулъ
ТАБЛИЦА КАКЪ СТАТЬ ПОЛКЪ ВЛАГЕРЪ

The Navy

Small Craft

The Baltic fleet in its early years consisted of small crafts only.[71] The first squadron of vessels departed from Olonets yard to St. Petersburg on 19 September 1703 and included one frigate, four buer, one fleit, two shmak, two galiot and one post-galiot. By 1705 there were 11 frigates, seven galleys, 10 snows, two branders, two bomb ships, two fleits, five buers, one schmak, two schkuts for bringing firewood, two galiots and one post boat.[72]

Frigates were the biggest vessels of the Baltic fleet until the 1710s. The first 10 frigates laid down on Syas' and Olonets' yards in 1702–1704 were of identical size, rigging and armament; it was the first attempt to build a regular fleet based on the same standard. The first *Shtandart* was built in Olonets yard in 1703; by the end of 1704 seven more were completed, named after recent victories *Shlisselburg*, *Sankt-Peterburg*, *Kronshlot*, *Triumf*, *Derpt*, *Narva*, *deFam*. They all were 28-gunners with 22 6 pdr and six 3 pdr guns, 28.04 m long, 6.71 m broad and 2.9 m depth of hold. The eighth, *Olifant*, finished in 1705, was a 32-gunner and the last frigate of the 1703 program, *Dumkrat* 32, was founded in 1706 – until battleships arrived she remained flagship of the Baltic fleet. A second program introduced bigger 32-gun frigates. *Svyatoi Pyotr* and *Svyatoi Pavel* built in Solombala in 1709 were 31.39 m long, 8.84 broad and had a 4.11 draft. *Samson* 32 became the first foreign purchase, being a gift from Menshikov to Peter; she was built to order in the Netherlands and arrived in 1711.

The second large class, after the frigate, was the snow. Frigates and snows constituted the core of the early Baltic fleet. The first snow, *Mon Coeur* or *Munker*, was founded after Peter's design in September 1703 and nine more followed by mid 1704. They all had 16 guns, two (rarely three) masts and oar ports, i.e. these sailships could row, too. Built to one standard they measured 21.95 m long, 5.64 broad and with 2.44 depth of hold. Bigger snows were built in 1710–1712: *Diana* and *Natalia* had 18 guns and were 28,65 m long, 7.6 broad and 3.05 m depth of hold, i.e. they were comparable to the early frigates. One of them was given three-mast frigate rigging.

Artillery defence of Kotlin required floating batteries. Two such 18-gun prams were laid down in late 1705. Bombardier galiot *Nadezhda*, built in 1708, had 14 cannon and two mortars.

There were other types of sail small craft. In 1707 besides 12 frigates and 10 snows they had built 6 buer, 2 fleit, 9 shmak and 20 shkut.

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71 This section is mainly based upon works of Professor Pavel Krotov (his chapters about beginning and development of the ship and galley fleets on Baltic Sea in a 1994 compendium (*Istoriia otechestvennogo sudostroeniia IX–XIX vv. T. 1. Parusnoe dereviannoe sudostroenie* [History of native shipbuilding in the 9th–19th centuries. T. 1. Sail wooden shipbuilding]. (SPb, 1994), pp. 83–168), and his monograph on the battle of Gangut (*Gangutskaia bataliia 1714 goda* [The Battle of Gangut in 1714] (SPb, 1996), pp. 28–48)) and article by Professor Nikolay Petrukhintsev ('Dva flota Petra I: tekhnologicheskie vozmozhnosti Rossii' [Two fleets of Peter I: technological capabilities of Russia] in *Voprosy istorii* [Questions of History], 2003, 4, pp. 117–128).

72 *Materialy dlia istorii russkogo flota (MIRF)* [Materials for the history of the Russian navy]. TT. 1–4. (SPb, 1865), Vol. 1, p. 109.

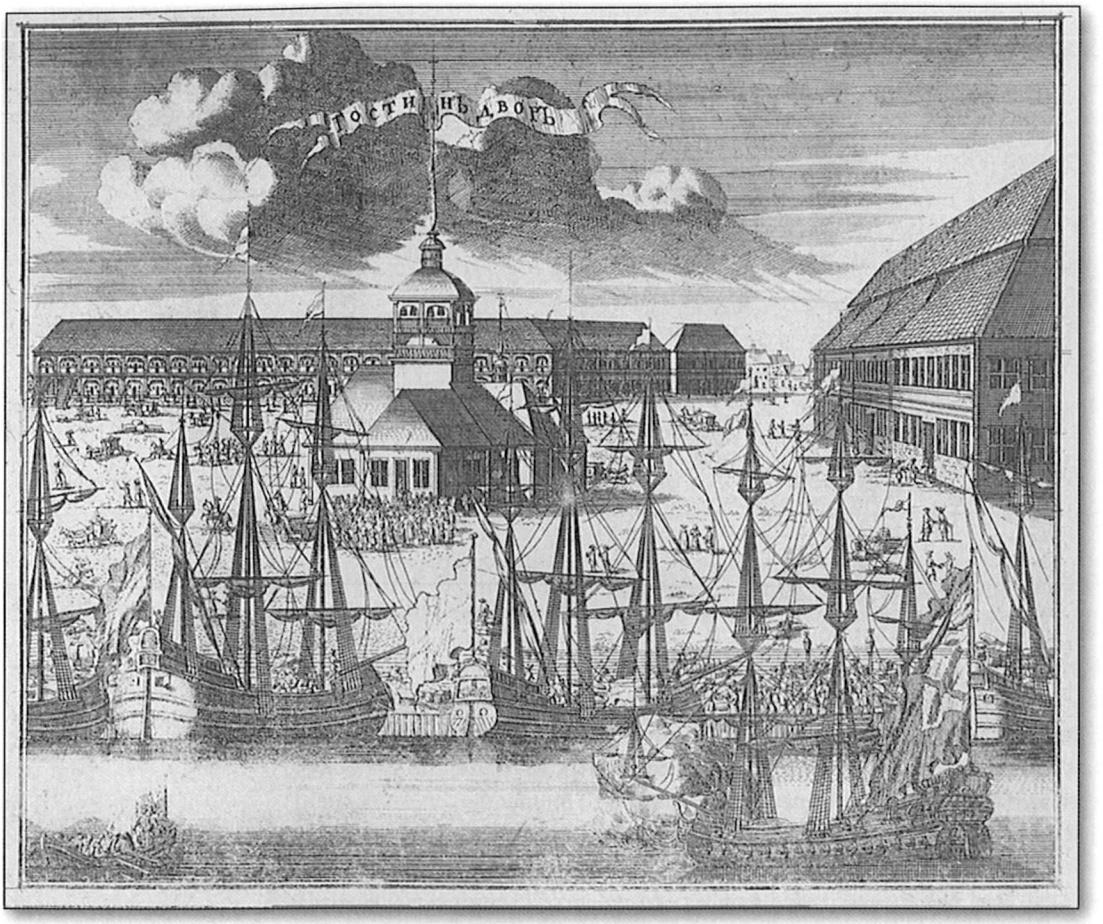
89. View of the River Neva and St. Petersburg fortress, 1714. (Pieter Picart (1668–1737))

Throughout the war years the Russians had been building big boats (*lodki*, pl.) of a native Russian construction. They had oars and one sail and could fit a small gun on the bow. Soldiers of the garrison regiments of Colonels Ostrovsky and Tolbukhin built them on Kotlin island and the boats were known as *ostrovskie*. Their capacity was 30–40 men and even more than that, according to Deane:

> He [the Tsar] had a considerable number of large lotkeys, much resembling scampavias, but still less, computed at 70 or 80 men each, of late years accompanying the others in all their expeditions on the coast of Finland and Sweden. In these vessels that never come in any great sea, nor the men obliged to go aloft, the Russians are very handy; as likewise, in building these lotkeys, performed by the soldiers without a master's direction, and seldom with any other tool but a hatchet; in management whereof they certainly exceed all nations under the sun.[73]

Karbas were Russian cargo boats used in quantities to transport provisions, ammunition, weapons, and horses after the galley fleet. Danish envoy Juel observed them in 1710 and recorded that they were vessels where planks were joined with ivy and caulked with moss; not a single iron nail was used in their construction. Still, it were these karbas that brought all cannon and mortars, flour, bread, and corn for the siege corps under Vyborg.[74]

73 [J. Deane], *History of the Russian fleet*, p. 95.
74 J. Juel, pp. 173–174.

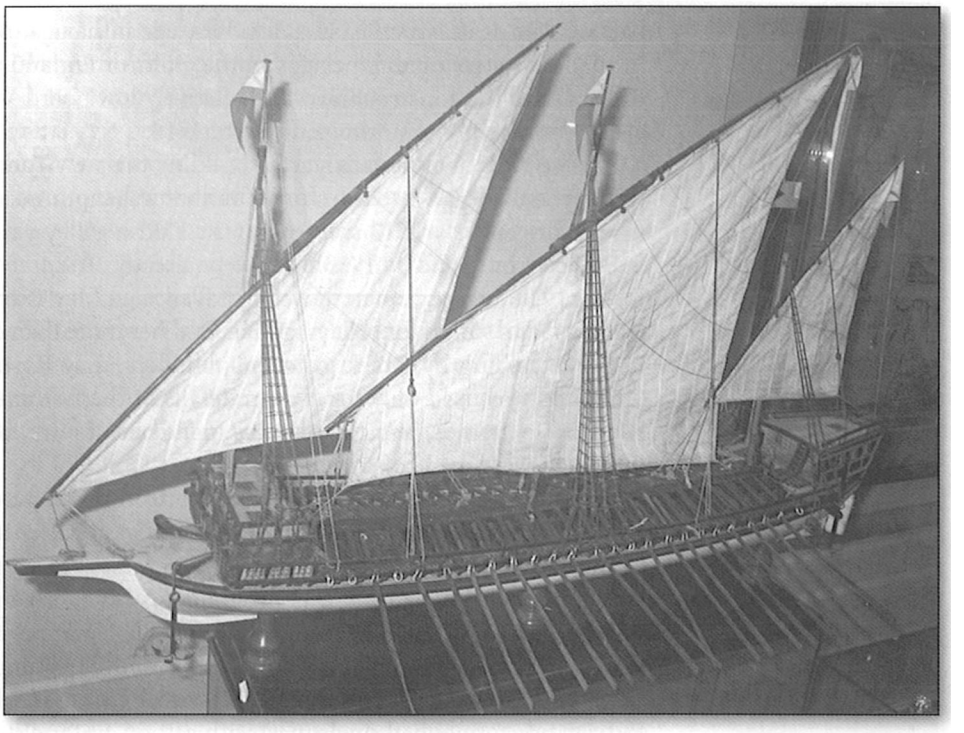


90. View of Trinity square in St. Petersburg. (Alexey Rostovtsev (1690–1746))

Galleys

The galleys – vessels with many oars and few sails – originated in ancient times and by the late 17th century were common in the Mediterranean. Tsar Peter had galleys in his Azov fleet, however their introduction in large numbers on the Baltic was a novelty. Already in 1703–1704 three yards in Olonets, Luga and St. Petersburg built for the newborn Russian Baltic fleet 140 rowing vessels – galleys, *scampavias* and brigantines. They were instrumental in operations in the shallow waters around St. Petersburg but the true importance of the galley fleet became obvious when Peter turned to conquering Finland and then to attacking Swedish shore. The Russians developed mass production of galleys of all types. They were built of raw materials by less qualified craftsmen which made them serve a shorter term, but at the same time construction was fast enough to replenish any losses.

The term 'galley' being the general name for this family of vessels, there was classification (albeit not always strict and clear) within it. The largest were full galleys. Seven were built in 1703–1704: Bocis' flagship *Zolotoy Oryol*, *Vera*, *Nadezhda*, *Lyubov*, *Aleksandr Makedonsky*, *Svytoi Fyodor Stratilat* and *Svyatoi Apostol Pyotr* had 60 oars and were 36 to 40 metres long. An eighth was the 53 metre long *Svyataya Natalia* built in 1707. Their depth of hold was 2.88 m. As Dane Juel learned from Admiral Cruys by late 1709, in the



91. Model of galley ***Som*** that took part in Gangut battle, 19th century. Exhibition of State Historical Museum, Moscow. (Author's photo)

fleet there were six galleys, 54–56 oars each with five cannon and 400 crew. Apparently this type built after Turkish manner had proved excessively big and heavy and was abandoned in the 1710s.

Second in size were called 'half-galleys' in the 1710s or 'big galleys' in the 1720s; they had 36 and more oars, were relatively few and were used as flagships. Their production after the Turkish manner started in late 1710 and lasted until 1718. A 38-oar would have a length of 33.53 m, breadth 5.64 m, depth of hold 1.45 m, load draught 1.52 m, and light draught 0.61 m.

The Tsar looked for better vessel proportions and in 1718–1719 decided he preferred the French galley building style, hence late in the war big galleys were of the French style. He also experimented with Venetian style, and built the 50-oar big galley *Dvina*.

92. Galley Flag. (***Ustav Morskoi***, 1720)

The majority were *scampavias* (or 'small galleys' in the 1720s), 'vessels of the same form exactly, but much less and rowing better', per Deane. Starting in1703 they were built after the Italian manner 21.9 m long, 3.1 m broad and 0.84 m depth of hold.

The new longer design of *scampavia* galley was introduced per proposal of Rear-Admiral (Schautbenacht) Bocis, a Greek in the Tsar's service. It was made in the so-called Turkish manner which – according to the consolidated opinion of experienced foreign and Russian galley officers who were asked about it in 1732 – was far better than the French or Venetian style in lightness of construction, swiftness, easiness of control both under sail and in rowing. A 32-oar had length 30.48 m; breadth 5.33; depth of hold 1.35; load draught 1.22 and light draught 0.56 m. Most important, the Turkish galley

had smaller draft – a considerable advantage in navigation near shore and in shallow waters of archipelagos in the Gulfs of Finland and Bothnia. The drawback of the construction was a relatively low board – it made 16 out of 98 galleys sink in the stormy autumn of 1714.

In late 1710 the Russians started building this new Turkish type in a yard near Vybor, where a Swedish store of timber was captured, and made the first three half-galleys and 13 *scampavias*. In 1712 a galley yard was established in St. Petersburg and by 1713 there were already 50 *scampavias*. Preparation for the 1714 campaign started well in advance: in May 1713 the Tsar ordered wood cut and stored for galleys, and in October more than 60 were laid down in St. Petersburg by Greek galley shipbuilders Yury Rusinov and N. Muts. Oakwood was used only for certain details of the framing (keel, stem, and stern posts, frames) and the rest was made out of pinewood. By May 1714, 64 galleys were ready.

The smallest galley-type vessel was the brigantine (not to be confused with the sail ship of the same name). From 1703 it was constructed in Italian style (20.6 m long, 2.97 m broad). Starting in 1706 these evolved into a broader and shorter so-called Russian-type (15.85 m long, 4.26 m broad and 1.52 m depth of hold) and in 1712–1713 – into a second Russian type, longer and deeper (18.11 m long, 4.37 broad, depth of hold 1.83 m). According to period prints, rigging on Italian brigantines included one or two masts with a square sail; Russian brigantines had single mast with gaff rig, jib, and staysail.

According to data received by Dane Juel from Admiral Cruys, by the end of 1709 the fleet had 20 brigantines 'of new pattern', i.e. Russian (4 guns and 50 crew) and 40 Italian brigantines (1 gun and 40 crew). Another eyewitness, Swede Ehrenmalm, saw brigantines in St. Petersburg in Spring 1713 having 14–20 oars, he noted they were very fast both under sail and rowing.

For the time being the brigantine was the most numerous rowing vessel but starting in 1712–1713 it gradually went out of use and was substituted with *scampavias*. In the 1714 campaign 60 Russian brigantines only brought provisions from St. Petersburg to Helsingfors and were sent back, thus not participating in the battle of Hanko and afterwards.

Galleys and *scampavias* had two masts with one Latin sail each. Krotov supposes that in certain occasions the mainsail mast could have been put down as is seen on a printed view of Kotlin in 1705 where four galleys are shown with foremast only. The late war French and Venetian big galleys had three masts.

The oars of the first full galleys were made of birch; smaller vessels had oars of pine and other wood. Surviving oars from the 1796 galley *Pernov* measure 13.2 m long and weigh 94 kg. Thickness of the oar did not allow it to be held, so five grips for oarsmen were attached to it and the sixth grip was the thin point of the oar handle. Number of oars varied from 30 (most commonly) to 38 oars (15 to 19 pairs of oars respectively) in 1714; by 1721 there were a few large 40–50 oar galleys.

Despite galleys being weaker in firepower in comparison with sailing ships because their boards were packed with oars, they achieved the most by placing artillery on the fore. The first large galleys in 1704 had three guns on the fore and sixteen 1 pdr and 2 pdr swivels all along the board (Admiral Bocis wanted

four swivels placed on the aft and aimed at oarsmen 'so that they do not rebel'). Bigger cannon in 1708 were one 36 pdr and seven 6 pdr guns.

In the renowned 1714 campaign galley artillery as a rule included one 12 pdr (sometimes an 8 or 6 pdr) on the fore middle (so called *kurshey* gun) and two 3 pdr guns to both sides of it; a few galleys in addition had two 6 pdr mortars to throw grenades or swivel guns *bas*. By 1721 the large galleys built after Venetian and French manner had 24 and 18 pdr middle guns and twelve 3 pdr swivel guns placed, probably along the board. Ammunition included balls, grapeshot, chain balls, mortar grenades, and hand grenades.

The army needed special vessels to transport horses for small detachments of Cossacks who accompanied the infantry in the fleet. For the 1713 campaign Apraksin ordered that 10 small craft, *karbas*, were prepared for the horses, 18–20 beasts in each. Three *scampavias* for 25 horses each were built in 1714, one of them, *Cherepakha*, is known to have had 32 oars. In the Gangut campaign there was one horse galley in the second division of every squadron. According to the 1721 registry,[75] horse galleys did not have a heavy middle gun but still bore four cannon (two 6 pdr and two 3 pdr) and had 90 oarsmen on 30 oars. In 1721 it was planned to build two bigger galleys for 40 horses each.

The first Russian Baltic galleys, like their Mediterranean prototypes, were manned by convicts – it was a hard labour to row those large vessels. After 1710 when the galley fleet became more numerous and was destined to transport a big army, foot soldiers were placed on the oars and the use of convicts stopped. Veteran officer of the galley fleet Unter-Lieutenant Filisov in 1732 wrote that the 1710s Turkish-style galleys were light and easy enough to be operated by 'honest soldiers' who were not experienced and fast enough for the job on large galleys.

On large vessels (46 to 50 oars) there were six men on one oar, on 36- to 44-oared vessels five men, 34-oared vessels four men; on 32-, 30- and 28-oar *scampavias*, three or four men. On brigantines, there were two men per oar. They sat on benches covered with leather and put their haversacks under it. Early full galleys had iron rings and chains for convicts. Benches set in the Turkish manner joined the board at right angles and those in the French manner at 81 degrees towards aft. The rhythm of the rowing was given by the *Komit*, the boatswain of the galley fleet, who blew a silver whistle hanging around his neck on a chain. The galley had a *kurshey* (from French *le coursier*) – a bridge running along the deck from fore to aft above oar benches, which allowed crew to walk along the vessel without hindering rowers. The brigantine did not have a *kurshey*.

Bocis in November 1704 wrote that a full galley crew was to be 70 officers, NCOs, sailors and gunners, 150 soldiers and 250 slave-oarsmen; per other documents from the same year there were 300 or even 350 rowers, which made the overall crew over 500 men. Per British envoy Whitworth in May 1708 the eight galleys lacked crews and had 200–300 men instead of 500.

75 MIRF, Vol. 2, pp. 544–545.

93. (Top): Navy flags per 1720 Marine Regulation: Standard of General-Admiral, Admiral's flag, white First Admiral's flag, blue Second Admiral's, red Third Admiral's, Keiser-flag (fortress flag since 1701, jack since 1720). (***Ustav Morskoi***, 1720)

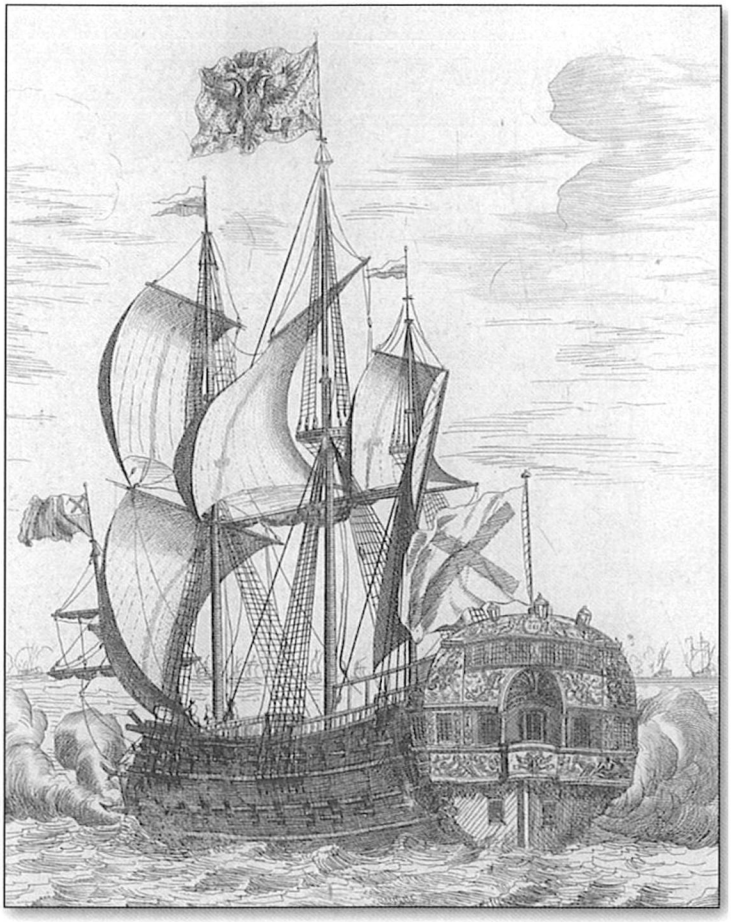
94. (Below): Navy flags per 1720 Marine Regulation: Admiralty, white-blue-red merchant, yacht and boeier, Komandor's pennant, Captain's pennant. (***Ustav Morskoi***, 1720)

When full galleys were abandoned, a *scampavia* crew was 150 soldiers and 250 for a half-galley, not all of them involved in rowing.

Infantry soldiers on the galleys belonged to the field army starting in 1713, when large-scale landing operations started. Prior to that they were soldiers of marine and garrison units. For example in 1712 at Wickolax *scampavias* had officers and men from Ostrovsky regiment and from the Rear-Admiral's marine battalion. Secretary to the Prussian Embassy in St. Petersburg, J.G. Fokkerodt, wrote that galleys were so easy to navigate that by the end of the war there were no infantry captains in the army in Finland who wouldn't be able to manage a galley as good as the best Greek pilot. During the Great Northern war, he added, the Russian galleys usually went under sail and came ashore almost every night; soldiers found such a travel so convenient and so much became used to it that even when in contrary winds they had to row they preferred it to marching with a load on their backs. One finds marks of the overnight camps of Tsar's galleys in many places along the Finnish coastline: stone ovens ('Russian ovens' in local memory, naturally) that were erected on the spot to bake bread.

That is not to say of course that there were no professional sailors in the galley fleet.Every galley had about six professional sailors – officers and other ranks. When in August 1708 Cruys urgently needed more vessels to oppose the Swedish invasion he asked Bocis that the newly built galleys were sent to Kotlin

from the yard as soon as possible with at least six men on board,[76] i.e. this number was enough to operate a galley under sail. In 1714 the half-galley *Sazan* had on board 226 infantrymen and six sailors; in 1719 *Som* had 222 and 14 respectively and the *scampavia*, *Musels* 125 and eight.



95. Ship of the line ***Poltava***, 1717. (Pieter Picart (1668–1737))

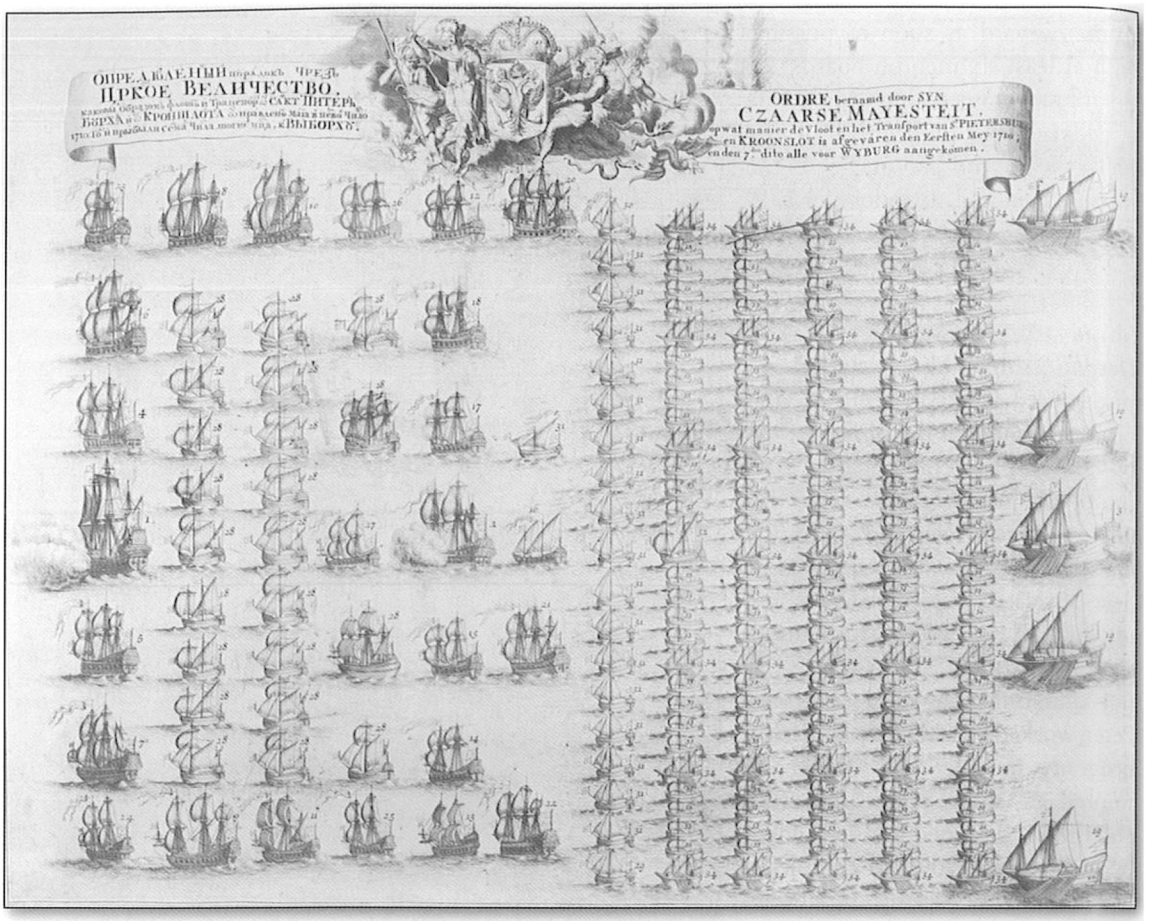
Ships

Despite shipbuilding started in yards near Lake Ladoga in 1702 and on the seashore at the mouth of the Neva which was conquered in 1703, the proper fleet of ships of the line only emerged after 1709. In the first period of the war Peter's Baltic fleet consisted only of frigates and other small vessels that stood under the protection of Kronslot and did not undertake any far operations; Peter worked out his first battleship program in late 1707 when he wanted 27 ships of the line. The *Poltava* 54, designed and laid down by the Tsar in 1709 and completed in 1712, was 39.83 long, 11.7 broad and had 4.64 m depth of hold. In the post-Poltava period activities escalated on the Baltic and the Swedish fleet remained the most powerful arm in the region. To cope with the enemy ships Tsar Peter needed his own large ships, lack of which he could not fill from his yards in the Baltic basin. Meanwhile he had to depend on his Danish ally.

Foreign purchase was the obvious and fast way to obtain the required vessels. A foreign bought ship was two thirds cheaper than one built in Russia; moreover, after demolition of the Azov fleet, Peter now saved that budget and could spend it elsewhere. In 1712–1714 Russia bought from abroad 17 ships, mainly 50- to 60-gunners; one of them was intercepted by the Swedes but others made it to Russia. Some were built to order like *Portsmut*, *Devonshir*, and *Marlburg* from the Netherlands. Some were old vessels or prizes sold by England or the Netherlands. For example, the now Russian *Leferm* had an impressive record: she was initially the French *Ferme* taken by the English at Vigo Bay in 1702, and fought as an English ship at Malaga in 1704.

Shipyards on the Baltic were unable to provide the necessary ships fast enough, so Peter had to use the only other shipbuilding area in Russia. The yard in Arkhangelsk, mainly fitted for merchantmen, in 1713–1715 built

76 MIRF, Vol. 1, p. 165.



96. Order of the Tsarist Fleet and transports that set out from St. Petersburg and Kronschlot on May 1st 1710, and arrived at Vyborg on May 7th. (Pieter Picart (1668–1737))

a series of seven 52-gun ships named after archangels (*Arkhangel Rafail, Yagudiil, Uriil, Varachail, Selafail, Mikhail, Gavriil*). Transferring them from the White Sea through the Northern Sea to the Baltic was lengthy and risky. For example out of three ships that left Arkhangelsk in 1713, one had to return, another wintered in Kola in Lapland and the third wintered in Trondheim in Norway; in the end all three made it to the Baltic but it took them a long time.

Nevertheless, local production went on. *Ingermanland* 64, completed at St. Petersburg Admiralty in 1715, so much pleased Peter with her excellent sailing qualities that she became the Tsar's flagship in 1715, 1716, 1718–1721.

Through these efforts, by 1715 Russia obtained a fleet of more than 20 ships as programmed in 1707. However they were mainly of low rank, i.e. under 60 guns, which was believed not mighty enough to oppose the enemy fleet. Thus Peter decided he needed yet another, more powerful fleet. That meant another strain on the country's economy; ships were built in haste, on average three years nine months per ship, out of raw wood which meant they would have served too short a term. Nevertheless, between 1719 and 1721 a new Baltic fleet with a core consisting of 80- and 90-gunners became available to the Tsar. The first Russian 90-gunner *Lesnoye* was built in 1718, *Gangut* in 1719, and *Fridrikhshtat* in 1720. The first Russian 100-gunner, *Pyotr Pervy i*

Vtoroy (Peter I and II), designed before Peter's death, was completed in 1727 in the reign of his grandson Peter II. Ironically this fleet did not take part in any actions but merely being there counted in the balance of powers; it allowed the galley fleet to perform its actions against the Swedish shore in 1719 and 1721 which eventually made the enemy sign a peace. In the end, all these high-rank battleships proved to be excessive for the Baltic theatre.

The last thing to mention is the bow figure: on Russian ships, frigates and snows it was universally a lion with an open mouth, standing on its rear legs.

Naval Armament

Iron cannons for the navy were cast in works in Olonets, Lipetsk and Voronezh. In 1710–1713 Peter carried out a reform of naval artillery. It changed the proportions of naval guns, which gave them a thinner barrel and weigh less. This in turn allowed larger calibres on the ships. Deane admitted in 1723: 'They are now arrived to a great perfection in casting of cannon, making of all sorts of small arms and ammunition, so that a modern cannon carrying 18 pound shot weighs no more than a 12 pounder cast ten years ago. These commodities will answer in most countries abroad.'[77] A 60-gun ship had 24 pdr guns on the lower deck, 12 pdr guns on the upper deck, and 6 pdr guns on the topside. 50-gunners had respectively 18, 8, and 4 pdr guns.

John Deane reported that by 1714 the Russians introduced in their navy 'reeds ready filled with prepared powder for the quicker firing of guns' and 'two vessels furnished with fire-spouts, or engines spouting liquid fire.' These latter must have been around as early as 1703 when a 'fire tube that threw flames far to strike ships and buildings' was brought from the Netherlands to Arkhangelsk. In 1705 brass incendiary tubes were erected on two snows, and later on frigates *St. Ilya* and *Lansdowne*. The instruction from 1714 read that the three ships equipped with fire tubes, *Strafford*, *St. Antonio*, and *Lansdowne*, were to engage the enemy upon seeing a green flag hoisted. They had to come as close as possible and not start throwing from afar in order to not to disclose their secret weapon; in the possible case of self-ignition, each ship was accompanied by a snow.[78] There are no accounts of actual combat use of these naval flamethrowers, however.

77 [J. Deane], *History of the Russian fleet*, p. 119.

78 *Ibid.*, p. 24. See also comment by Krotov in a Russian translation of Deane (J. Deane, *Istoria rossiiskogo flota*, (SPb, 1999), p. 164) and MIRF, Vol. 1, p. 503.

3

Training and Combat Experience

Drill Manuals and Instructions

Pre-War Regulations

Russia's earliest known infantry manual was published in Moscow in 1647 and was essentially a translation of Wallhausen's treatise *Kriegskunst zu Fuss* from the early 1600s with the same illustrations. The first Russian document related to the tactical training of the Petrine period is the so-called *Weide's Regulation* (*'Ustav Weide'*). Adam Adamovich Weide, a foreigner's son born in Russia, the major of the Preobrazhensky regiment, travelled to Europe in 1696 and in 1697. In these trips he must have learnt contemporary European warfare, mainly in the Imperialist army. He spent some time with Austrians in 1697 and took part in the battle of Zenta under Prince Eugene of Savoy against the Ottomans. Then he was in the Netherlands and Britain and upon his return to Russia Weide submitted a handwritten report to the Tsar in 1698 in which he thoroughly described the details of European infantry service. It was not a regulation in the strict sense of this term as it was more a treatise presented by an officer to a sovereign, but it was supplemented with printed illustrations and perhaps was distributed among the Russian military along with later official regulations. In 1841 it was printed, hence it became fairly well known to historians. No other Russian drill manuals of the Petrine period were illustrated, to the sorrow of artists, reenactors and miniaturists of our time. This document has particular value as it gives a snapshot of what a modern army was believed to be in the late 1690s with many legacy articles such as matchlocks and pikes put aside. Weide's work did not reflect the factual state of the Russian army of the period, some of features described in it were indeed introduced, but some were probably not. Still, it was the first detailed manual which obviously affected documents that were created later on.

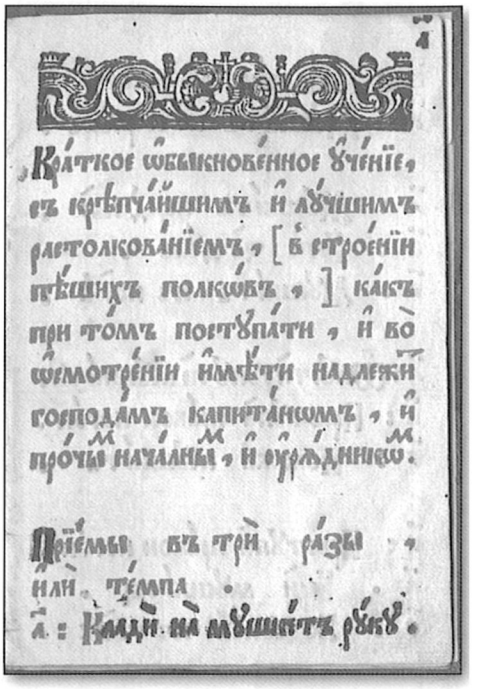
As was common, the book starts with a dedication to the Tsar. Then Weide describes what an infantry company is and the ranks in it from Captain, Lieutenant, and Ensign, down to Sergeant, *'Podpraporschik'* (*Fenrich* or Under-ensign), *Kaptenarmus* (Captain-of-arms), Company clerk and *Feldsher*, Corporal, *Gefreiter*, Drummer, and *Liebschutz* (officer's

bodyguard). Weide subdivides infantry into musketeers, grenadiers, and pikemen, although he notes that pikes have nearly fallen out of use with the introduction of fusils with bayonets.

Then he goes to battalion and regimental level, laying out the duties of the colonel, lieutenant-colonel, and major, as well as regimental staff such as quartermeister, adjutant, wagenmeister and provost. At the next level: the brigade with a brigadier and the army with general ranks: *generalissimus*, general of infantry, general-feldzeughmeister, general commissioner, general quartermeister, general adjutant, general auditor, general engineer.

Arms Manual

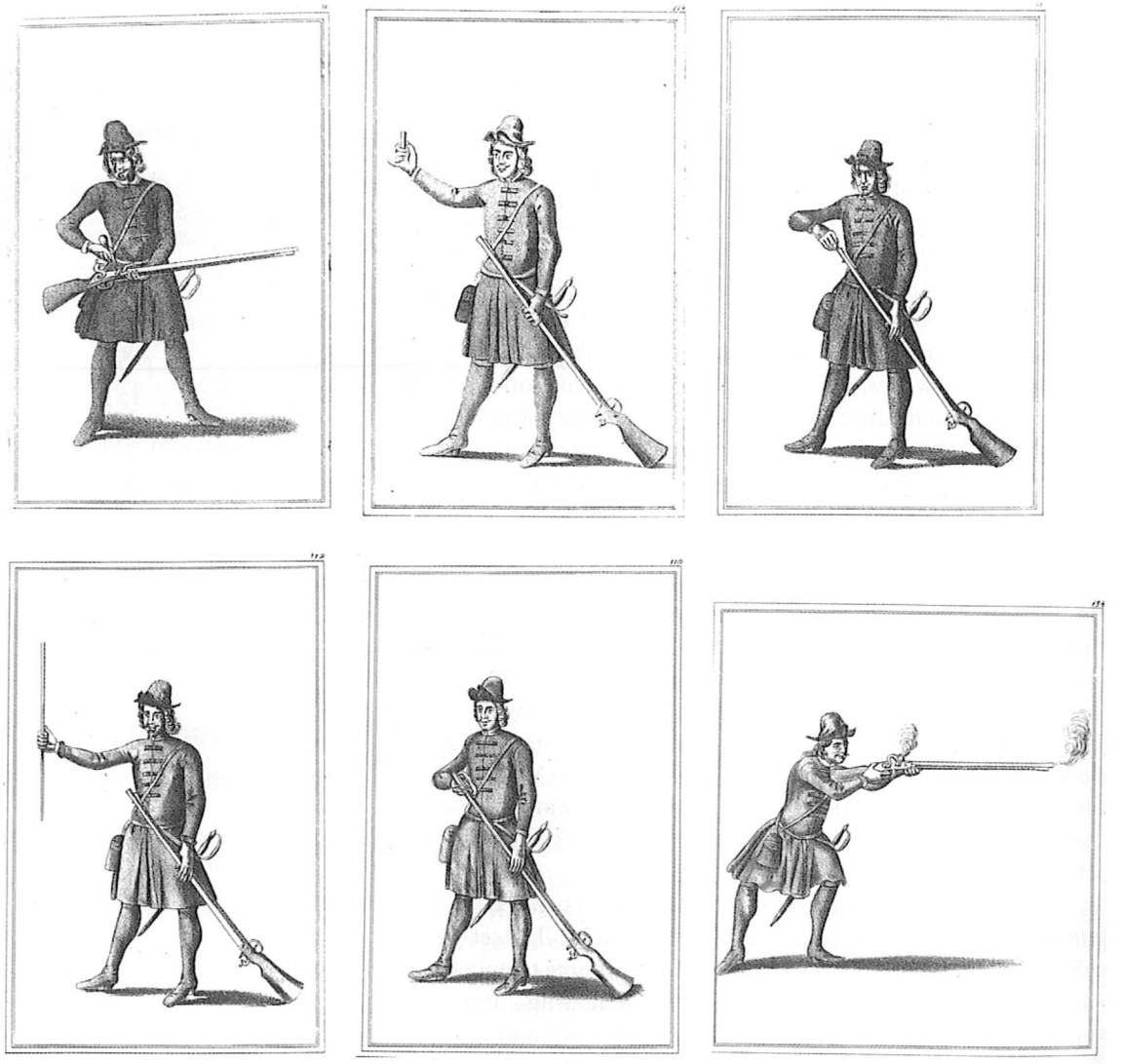
Before speaking about exercise of arms, Weide first indulges in a very informative discussion of the depth of formations. He presents the period's two main paradigms of forming infantry – in four and in six ranks and gives reasoning for both of them. (Note, he does not mention three ranks because it was doubled six ranks). Opponents of six ranks, he writes, were saying that this formation is more susceptible to disorder and that this deep formation has a shorter frontage, hence it is more vulnerable to being outflanked. Proponents of six ranks, Weide being one of them, claim that disorder is not a problem since the old-fashioned method of firing by ranks in countermarch had been abandoned and that new methods allowed to give fire faster and more frequently in six ranks rather than in four. They also add that a deeper formation is more steady from both the front and from the flanks. Perhaps Weide was very impressed by the success of the Imperialists (with their deep formations) against the Ottomans (who were the most probable foe for Russia at that time, 1698). So Weide advised the Tsar to go with six ranks and this formation was adopted in the 1699 manual and was used by Russian infantry in the early period of the Great Northern War.



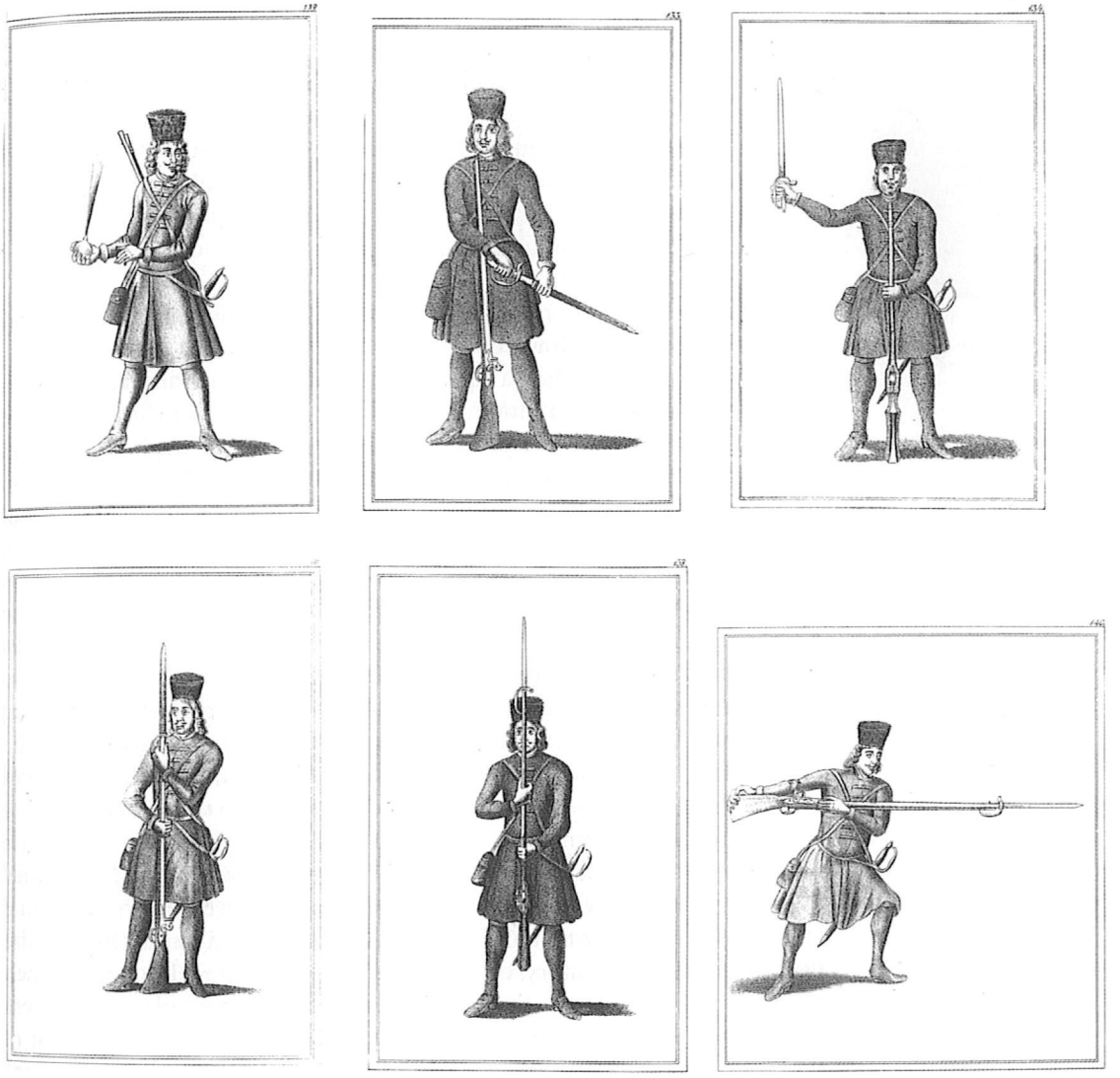
97. First page of the 1699 manual printed in old Cyrillic type.

The arms manual that follows consists of short text descriptions and prints, showing soldiers in East European costume. The set of commands is rather typical, each command to be executed in three tempo: Shoulder arms – Present arms – Order arms – Lay down arms – Take up – Present – Club your musket; special poses included 'Cover lock from rain' and 'Arms to funeral'. A section on loading and firing a musket shows a flintlock. The manuals in some other armies in these transitional years, like the British 'Exercise of the foot' and Swedish 'Forordning och Reglemente for Infanteriet', both printed in 1701, still described operations with matchlocks. The first phase of the procedure is open pan and prime (primer or powder horn is not mentioned in the text but is shown on a print), then take cartridge, bite, load, ram etc., overall 12 steps. Weide also notes that these lengthy words of command were only needed when training, but in a battle the triad 'Load – Aim – Fire' is enough.

After the musketeers' drill Weide turns to grenadiers. Their manual starts with handling a grenade i.e. taking grenades out of a bag (thus, steps where



98. Manual of arms. Loading a flintlock, as shown in Weide's treatise, 1698.



99. Manual of arms. Grenade and Bayonet exercise, as shown in Weide's treatise, 1698.

musket is hung on a sling over the shoulder are omitted), then goes to the opening of the fuse with teeth, ignition of a fuse with a match and hurling the grenade. Bayonet exercise continues the grenadiers' drill where the plug bayonet is attached to the muzzle, presented, and then leveled at a mans' chest ('charge bayonet breast high'). Then men were to face right, left, and about, with presented musket.

Evolutions and Methods of Fire

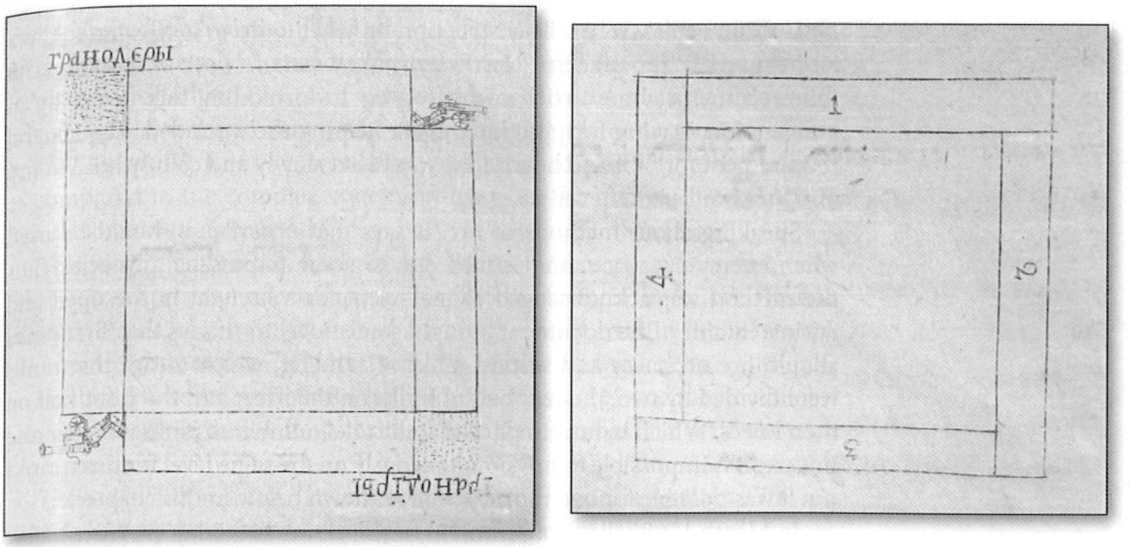
When it comes to evolutions of a formation, Adam Weide put aside some of them that he thought were now unnecessary – namely countermarches that are found probably in all European infantry manuals of the period. Wheeling was not mentioned in his text at all, nor marching. He only writes about 'doubling of files' (i.e. making 12 ranks out of six while halving number of files) and 'doubling of ranks' (i.e. reforming from six to three ranks while doubling the number of files).

The only infantry formation described was a hollow square, that was taught to be done with four equal sides.

Weide claims that when a square is formed against cavalry and 'you are to fire at the enemy on all four sides' then the best fashion is the 'falling of ranks' or *nederfallen*. It did not require men walking through a formation and maintaining wide gaps between files as it was when firing by ranks in countermarch – the rear ranks fired standing up over the heads of the front ranks who knelt. This is how it was described in the 1699 Manual: 'Form eight or six ranks, and when it comes to firing, order all the front ranks to kneel down, and the rear rank to aim, fire and then kneel down, then the next rank in front of the rear rank will stand up, aim and fire. Other ranks should do the same, and reload when down.' The front rank was to reserve its fire until the last moment and have bayonets fixed to meet the charging foe. According to Weide this firing method, *nederfallen*, was invented by the Saxons and then copied by the Imperialists. However, according to Brent Nosworthy this method had been invented in France in the 1670s.[1]

Another firing technique described by Weide was platoon fire: 'This use of platoons in combat is very good and is used today in almost all armies, especially in French who invented it.' It is a curious note because nowadays it is common knowledge that platoon firing was introduced by the Dutch in the last quarter of 17th century, that the British perfected it and that the French were not known then for their effective fire. That is how platoon fire was described in the 1699 Manual: 'Double ranks [i.e. make three ranks out of six ranks] and upon doubling divide [the line] into eight platoons (or parts). Order the first rank to knee and the two rear ranks to close up, so that the middle [rank] could fire through the first rank and the third rank – through the middle rank without harming each other. Fire platoon after platoon, and after firing the first ranks reload on their knees, and the rear two ranks step back a little and reload, then resume firing again.' It is not clear in the text which unit was to be told off in eight platoons – probably a battalion.

1 B. Nosworthy, *Anatomy of Victory: Battle Tactics 1689–1763*, p.50.



100. Hollow square as per 1716 exercise.

Weide's 1698 treatise ends with a description of guard duty, parole and the beating of taptoe.

The first official drill manual based on Weide's report was printed first in 1699 and in 1700 under the name of 'The Brief Drill Manual with the best explanation (on forming foot regiments)' (*'Kratkoe obyknovennoe uchenie...'*). It was a small pocket book with text only. It repeated Weide's arms manual including handling and loading a flintlock. The bayonet exercise got an additional motion: stabbing after the musket was levelled breast high. There was no grenadier exercise in the 1699 and 1700 editions of the Brief Manual, but it appeared in the 1704 edition copying Weide's wording with the addition of steps to sling the musket on one's shoulders. Facings and doublings remained the same, and still there was nothing on marching and wheeling.

The methods of fire in this regulation included 1. Fire by platoons, 2. Fire by falling ranks or *nederfallen*, and 3. Volley (Salvo). The first and the last were to be done in a three-rank formation.

Wartime Tactical Instructions

Battles in the open field, where troops could employ skills from the 1699 manual, were rare (to say at least) for the Russian army in the early years of the war. Still, war experience made it important to introduce not only drill manuals but combat instructions as well.

Perhaps the first instruction of this type, 'The articles for the time of military campaign' (*'Stat'i vo vremya voinskogo pokhoda'*), was issued in 1703 and repeated in 1704. It was dedicated to the behaviour of men in combat and on march. Crying out when in formation was forbidden. Fire was to be given slowly rank after rank; musketeers were to aim low rather than high. Other articles requested that leaving formation for plundering was prohibited until permission was given. Stand to the last man and do not retreat when neighbour units retreat; rear units have order to fire upon those who flee. Do not leave formation for the pretence of helping the wounded; this should be done solely by officers' servants, drummers, musicians, clerks, and provosts.

In 1706 Peter wrote 'The Instruction on what to do in battle, for soldiers and especially for officers' (*'Instruktsiya kak vesti sebya v srazhenii...'*). It followed the previous articles with respect to forbidding talk or crying in a formation, leaving for plunder and for helping the wounded. The general requirement for foot and horse alike was to act slowly and calmly both in fire and in advance and never rush.

Speaking about methods of fire, it says that *nederfallen* should be used when enemy cavalry cannot attack due to some impassable obstacle. Thus the method was acknowledged as inefficient for a firefight in the open and against infantry. The document brought some novelty – it says that 'first ranks should fire on knees and second ranks – standing', which meant that ranks were divided by two, the rear half of ranks on their feet and the front half on their knees. Which in turn implied that the total number of ranks was four and not six (it is impossible to fire simultaneously on the same level for three ranks but it was possible for two ranks as will be shown below in this chapter).

In March 1708 'The Establishment for Combat as of today' (*'Uchrezhdenie k boyu po nastoyaschemu vremeni'*) was issued. Its goal was to instruct experienced infantrymen who had already learned the basics of the drill - they were supposed to learn how to behave in combat and how to observe good and unhurried fire, accurate aiming, correct wheelings, dressing of the line, outflanking of the foe, and seconding friendly troops (on a side note, different approaches to training was evident not only in this document: in Menshikov's Division in March 1709 old soldiers were issued six rounds and young soldiers 12 rounds).

When describing roles, the 1708 Establishment states that the main task of a battalion commander is to lead a battalion to a firing position, give the first order to open fire, and then ride in the rear and watch his line, while subsequent fire will be controlled by company commanders. Four ranks formation was formally prescribed as well as two methods of fire: by ranks and by platoons.

'The first rank should never fire without extreme need, but should hold its muskets with fixed bayonets; ... three ranks should fire alternately ... And officers should strictly observe that the third rank is ordered to fire when the rear rank is loaded for sure.' The text of the 1708 document is not clear as to the way of 'alternating' ranks, it also does not specify if any of the ranks were to knee when firing; however the 1706 Instruction described that 'the first ranks' (i.e., probably the first two front ranks) were to fire on their knees. The description of fire by ranks was refined in the 1716 Regulation: 'The first rank (or all) fix bayonets, the rear three ranks close up. The first two ranks knee, rear rank aim, fire! Then the third rank fires and the second in a similar way. But the first rank does not fire without need.' It is obvious in this case that ranks were to fire through each other: the fourth rank in the intervals of the third rank and the second rank in between the first rank.

The 1708 Establishment sets platoon firing as the preferred method as compared to rank firing. A company was to be divided into four platoons. The battalion commander was to order the volley of the first platoons, then individual platoon commanders (placed on the right flank of their sections) were to control the fire of their respective platoons independently, only taking

care that the fourth platoon fired after the first platoon has reloaded. The first rank did not fire but was ready with pikes and fixed bayonets. Thus, out of 16 platoons of a battalion, four platoons (placed equal distance from each other) fired simultaneously, while the remaining platoons were reloading or staying ready. This was a relatively easy way of alternation of platoons as compared to the complex system of firings in the platoon fire known in British sources of the period.

This document is the first among Petrine instructions that mentions pikes – it reflects the reintroduction of pikes in 1707–1708 for the Russian infantry. Pikes were now prescribed for every second man in the front rank (i.e. every eighth soldier was deprived of a musket and was armed with pike and pistol). However, no details as to pike exercise were given. The documents also described the duties of officers and NCOs in combat and their places in the formation.

The Rules for the Battle ('*Pravila voennoy bitvy*') appeared first in 1709 just prior to Poltava, based on the experience of Holowczyn, Dobroye, and Lesnaya in 1708; later it was repeatedly sent to the army in 1713. It mainly described the cooperation of arms. When advancing towards enemy positions it was instructed to detach men from the infantry to try to shoot down the crews and horses of the enemy artillery (this resembles the function of skirmishers of the later period). 'The closer to the cannons the safer', so it advised to approach a battery as fast as possible and try to capture guns and nail them.

Much attention was devoted to the behaviour of cavalry. In previous battles, it said, horse troops tended to charge without command when neighbour units were sent to attack, and it led to disorder. So strict obedience was emphasised; pursuit of a fleeing enemy was only allowed with minor troops while regiments and squadrons were to retreat towards friendly infantry, re-form and take their place in the order of battle.

Dragoon Exercise

If the infantry was well supplied with regulations, instructions for cavalry were few. We know of one document from 1701 named 'The Brief regulation necessary for teaching horse (dragoon) formation' ('*Kratkoe polozheniye...*'). It wrote about a regiment's NCOs, their duties and places in a line. Three ranks deep line was prescribed for cavalry. Wheelings were to be done with musket presented (butt on the right hip) and only hung on a sling when the manoeuvre was over. The document has no arms manual, but instead it is mainly dedicated to the methods of fire for mounted troops.

Fire by ranks on the spot: men of the first rank were to stoop in their saddle, the second rank to aim straight and the third rank to stand up on stirrups. The rear rank fired first, then the second and finally the front rank sat straight and fired. Volley fire and platoon fire was to be delivered in the same position – each of three ranks did it at a slightly varying height (stooped, seated, standing).

Firing by ranks in retreat was done in six ranks, i.e. after doubling. The front rank fired and filed off left and right to the rear, giving way to the next rank to fire. Firing in advance was done in a similar way with those who fired

remaining on the spot and reloading while the following rank rode in front of them to give fire and so forth.

There was another document translated from German in 1701, and it was the dragoon exercise with a manual of arms. Men were to ride, then stop and fire musket and both pistols in succession, then dismount, fire, and reload on foot. Manipulations with the sword were limited to only taking it in the right or the left hand when grasping the musket or one of the two pistols. Nothing was written about charging with cold steel. According to numerous period records, the typical manner for Russian dragoons was first give a volley from the saddle then drop muskets to hang on belts, draw swords and charge.

It turns out that there was a version of the 1708 'Establishment for Combat as of today' for dragoons.[2] It remains a nearly unknown text although it was published in 1901. In general the text follows its infantry prototype with 'soldiers' replaced with 'dragoons'; but there are important nuances, too. Firing from horse should be in three ranks or in two ranks if one needed to form a longer line; firing on foot should be in four ranks. When describing fighting on foot, this dragoons document gives details that were not in the original infantry text. For example, it explicitly states that musketeers in the front rank should point their muskets at the *Reiter*'s breast like *chevaux-de-frise*; when aiming, men should place the butt against the shoulder, aim at the man's knee and not turn their face away when giving fire. It also prescribes places of dismounted officers in the dragoon formation on foot.

The next and the last known cavalry manual of the Great Northern War period was the 1720 Dragoon Exercise issued by Menshikov.[3] It starts with the observation that regiments of cavalry by then had varying exercises that might have caused confusion in action. Besides a new horse exercise for all, infantry exercise had to be practiced by dragoons when dismounted. Menshikov paid attention to the poses that should distinguish a soldier from a dismounted dragoon. If a soldier carried a musket on his shoulder or presented it, a dismounted dragoon was to carry his musket in his hands in both occasions. When on horse, dragoons were to hold the musket butt on their hip; only horse grenadiers were allowed to ride with drawn swords.

The horse exercise included an arms manual rather similar to the 1701 one. It included drawing a sword, riding with hilt on hip and putting it back in its sheath; carrying the musket on the hip, loading and firing in the saddle, hanging the sword on the sword-knot while handling pistols, hanging the musket on the belt or putting its butt into the holder. Then the exercise covered the wheelings and facings of a squadron or platoon, countermarch, evolutions from a three-rank to a two-rank line. Regiment *de caree* formed in four ranks of dismounted dragoons who now acted according to the infantry manual. The text ended with mounting, dismounting, linking horses and a grenadier exercise.

2 N.P. Volynskii, *Istoriia leib-gvardii Kirasirskogo ego velichestva polka 1701–1901* [History of theLife Guard Cuirassiers of His Majesty's Regiment], T. I. Kn. 1, (SPb, 1902), pp. 166–168.

3 *Stroevye ustavy, instruktsii i nastavleniia russkoi armii XVIII veka. Sbornik materialov. Sost. K.V.Tatarnikov* [Tactical regulations, instructions and manuals of Russian army in 18th century. Collection of materials. Compiled by K.V. Tatarnikov]. (Moscow, 2010), Vol. 1, pp. 87–92.

Military Code

While all previous manuals were rather short, a more universal and full Military Regulation or Code ('*Voinsky Ustav*') was introduced in 1716. Of course it included far more than just exercises. The first part was a Code as such: it described ranks in the army, organisation of sentry duty, winter quarters, garrison duties etc. The second part comprised Articles of War, i.e. military law, with a description of legal processes. The third part was dedicated to tactical matters, described in the sections 'On Exercise' and 'On preparation to march' – these referred only to the infantry. The exercise included an arms manual for flintlock, grenade, and bayonet, and basically repeated the 1699–1704 Manual. Formation being four ranks deep, the same evolutions of doubling of ranks or files were described.

A hollow square with equal sides was to be formed either with grenadiers and regimental cannon in the corners, or without them. The wheeling of lines by platoons, companies, battalions, or regiments was mentioned but still not described in any detail – the 1716 Regulation only said that this matter was too well known in the army to describe it.

The chapter on marching described departing and arriving at the camp or quarters, moving in column, forming a line to exercise, the places and responsibilities of NCOs and officers in the formation, establishing guard duty, and giving out password, drum beats. The third part of the Regulation was dedicated to the duties of various ranks within a regiment from corporal to colonel and basically followed Weide's text.

In 1722 Peter issued a short commentary to the Code where he stated that officers must behave as if they were fathers to their soldiers: to take care of their needs and not to burden them with unnecessary duties, especially on campaign. Commanders must not follow the Code blindly, concluded the Emperor, as if he knew this would often be the case.[4]

Officers' Pocket Books

The tactical instructions were distributed both in printed and in handwritten form. The Code was printed in 1716 and later on even bilingual editions are known in both Russian and German, probably for the use of foreign officers. The Brief Manual was printed in 1699 and 1700 and then again in 1704.

These documents were sent to the generals or to particular colonels, who in turn brought them to their regiments. For example the 1706 Instruction mentions that its part about firing had been already given to several regiments ('as has already been pointed out to the regiments of Strekalov, Skoulin, Poutyatin and others'). Exemplifying this is the 1708 Establishment: a copy signed by the Tsar was handed in March 1708 to the commander of the Pskov and Narva garrison, Kirill Naryshkin, who then disseminated the document among officers in his command. At the same time a similar document was issued to the generals of the main army then in Poland-Lithuania.

Besides printed copies that were distributed in a centralised manner, tactical instructions were also spread in the army in handwritten copies.

4 *Severnaia voina. Dokumenty 1705–1708*, pp. XXXI–XXXII.

Some officers used to copy drill manuals and military laws into their personal handbooks. Lieutenant Ivan Kozhevnikov did this after he received the 1708 Establishment from Naryshkin on 2 April 1708; as did regimental Captain-of-Arms Fedor Petrov, who had been copying official documents (and even poems of his own) into his handbook throughout the whole war. Both handbooks have survived to our time.

Such were instructions for the Russian infantry and dragoons during the Great Northern War. While thorough study of battle tactics requires analysis of the battle experience rather than that of regulations, these documents help us to see training in the period and what were the ideal, albeit not necessarily practical, combat methods.

The Russian tactical doctrine as is seen in the documents reviewed was mainly defensive and its main tool was firepower. It took eight to nine years to master this approach against aggressive Swedish tactics. Sheer masses did not guarantee success in repulsing Caroleans nor did it help European training per se (see Saxons and Danes vs. Swedes). It would be oversimplification to ascribe victory to only one single reason, but when speaking about tactics it was probably increased discipline and firepower as well as the developed steadiness of Russian infantry in the open field that helped it to endure in the end. An offensive with bayonets, swords, and pikes was mainly worked out when attacking foe's fortified positions, and these occasions were more common than collisions in the open field.

Field Tactics

Infantry

After the defeat at Narva in 1700 Peter had long been hesitant about giving pitched battles against the Swedes, as is evident from his correspondence. For example, the instruction to General Repnin from 3 October 1704 read that Repnin's Corps was sent to Lithuania to support King Augustus in all his moves except for the case where the King should want to have general battle against the main Swedish army. Only actions against parts of Charles' army were allowed.[5] The same was confirmed early in 1705 when Peter in letters to Menshikov and to Sheremetev said that large battles against the Swedes were to be avoided.[6]

It was also the feeling of his Generals that they could not fight on a par with Swedes. Hence the first Russian victories in the war – like Erastfer – were gained through greater numbers. An illustrative observation was made by Major-General Peter Apraksin in his letter to Menshikov in spring 1704, when he anticipated a Swedish attack on his positions in the Narova river delta. 'You know my Lord that even our good troops should be double as many as the Swedes to oppose them.'[7] Apraksin's troops at that moment were few and

5 N.P. Volynskii, *Postepennoe razvitie russkoi reguliarnoi konnitsy*, T. 3, p. 310.

6 *Severnaia voina 1700–1721 gg. Sbornik dokumentov*, (Moscow, 2009), pp. 239–240.

7 NIA SPbII RAN, F. 83. Op. 1, D. 250, p. 2.

101. A four rank formation at the ready. Reenactment group "Preobrazhensky Life Guard regiment, 1709". (Photo and postproduction by Gennady Kazak)

far from good; luckily for him, Swedish commanders in that region were as cautious as he was and did not dare to attack.

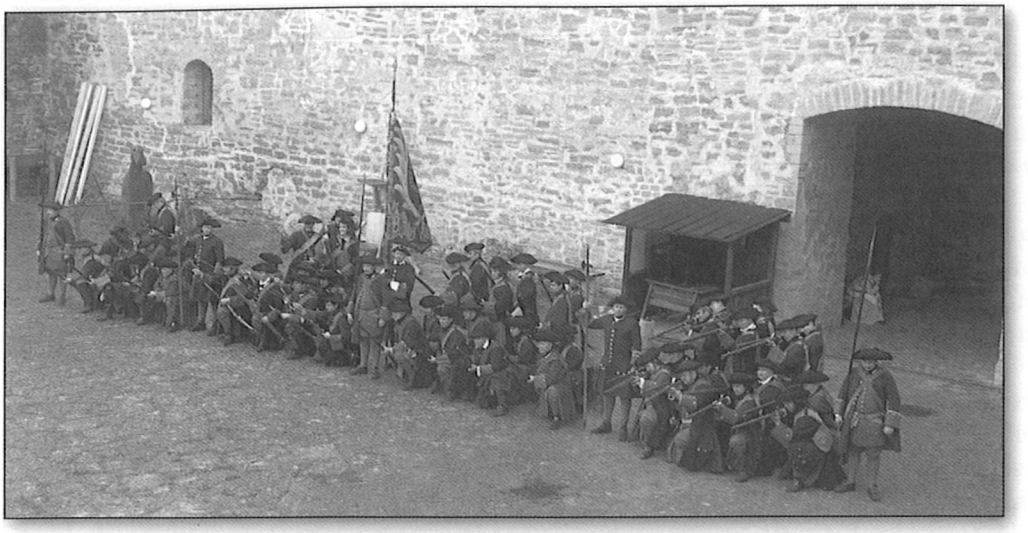
It was only in 1708 when Peter resolved to attack the Swedes but even then he preferred to act against separated enemy forces and on broken ground.

On October 1708, after the victory of Lesnaya, Peter wrote to General-Admiral Fedor Apraksin (brother to the above) and instructed him on how to defend Ingria and St. Petersburg against the invading Swedes:

> Put new troops into towns, gather all the old troops and then with God's help you can give battle. I only ask you not to do so in open field but near forest, which is very advantageous as I saw myself, because in this [Lesnaya] battle if not for woods they would win for they were six thousand more then us.[8]

The first pitched battle where Peter took part in person or at least observed closely occurred on 10 September 1708 and is known as battle of village Dobroye (where the Russian headquarters were that day) or the River Chernaya Napa (where the Swedes were). The next day after the fight he confessed in letters to his family members and to his generals: 'Since I started my service I had not seen such a fire and orderly behaviour of our soldiers, Lord let it be so further on. Neither Swedish King saw anything like this from anyone during this war.'[9] It was the period of war when the Swedish army approached the frontier of Russia towards Smolensk and moved along marshy rivers, and the Russian army moved in parallel on

8 *Pisma i bumagi*, T. 8, 1, p. 183.
9 *Pisma i bumagi*, T. 8, 1, p. 111.



102. A company performing platoon or alternate fire: one platoon presents, another is at the ready, third loads, fourths primes muskets. Reenactment group "Preobrazhensky Life Guard regiment, 1709". (Photo and postproduction by Alexey Goss)

the other side to prevent the enemy crossing. Once the Russians saw that the Swedish column of Major-General Roos encamped at a distance from the King's main army, they upon military council resolved to surprise the enemy, who amounted to four foot and one horse regiment. During night under cover of thick fog, eight assorted infantry battalions (Preobrazhensky, Semenovsky, Ingermanlandsky, Astrakhansky, Grenadiers, Kievsky, Schliselburgsky, Narvsky) under Major-General Mikhail Golitsyn crossed two rivers and a morass by throwing into the bog mats of interwoven small trees and fascines. At six in the morning they fell upon the Swedish camp, throwing frontline enemy battalions in disorder and indulging in a bloody and obstinate firefight with others that lasted around two hours. The sides were nearly equal in numbers until King Charles arrived with more troops. Golitsyn was to be supported by 30 squadrons of Lieutenant-General Pflug but the latter failed to cross the morass and did not arrive on the battlefield. Thus, having no objective to hold ground on that side, Golitsyn started a retreat fight to re-cross the morass. In the rear fought a battalion that suffered most. The Tsar emphasised that the retreat was carried out in order and that 'his' regiment, i.e. Preobrazhensky, had the greater share of labour that day. According to the detailed death toll, out of an overall 1,191 men wounded and 197 killed, Preobrazhensky alone lost 312 and 40 respectively plus 73 men missing, of whom some returned to ranks and some probably drowned in the marsh; all four captains of the battalion were wounded; it was more indeed than the other battalions suffered.[10] Per Adlerfeld, Petrine infantry in retreat formed a long hollow square and in the end fled in disorder, and many were later finished in the morass. One Russian officer was killed in a bog when attempting to carry away a pair of captured Swedish flags. The Swedish loss was considerable and comparable: 261 killed and 750 wounded which included many officers.[11] As mentioned above, Tsar Peter

10 *Ibid.*, p. 109.

11 Adlerfeld, Vol. 3, pp. 37–39.

was well satisfied with the results of the action where six enemy flags were captured; after Holowczyn his infantry – at least its chosen part – proved capable of opposing the Swedes without numerical superiority and Golitsyn was awarded the Order of St.Andrew.[12] James Jeffreyes, an English captain present with the Swedish army in 1707–1709, reported after Dobroye: 'The Swedes now own the Muscovites have learnt their lesson much better than they had either at the battles of Narva or Fraustadt, and that they equal if not exceed the Saxons both in discipline and valor, 'tis true their cavalry is not able to cope with owrs, but their infantry stand their ground obstinately.'[13]

Another reason to be proud of Dobroye was that it rehabilitated the Russian infantry after the defeat in the recent battle of Holowczyn on 24 July 1708. In this, yet another (and the last) bright victory of Charles XII, the Russian army began retreating soon after the attack started and offered very few instances of encounter with the enemy. Still, materials of the investigation held afterwards provide some curious insights on the actual battlefield behaviour – such details are lacking as a rule in victorious after-action reports.[14] The Tsar travelled from Narva that day and when he arrived at the army six days later he wanted to know about the behaviour of his troops – whether they followed his instructions ('how battalions fired: by platoon or by ranks or other way?') and whether they observed the honours of war ('when in retreat, did the drums beat and did the flags fly?') The first unit to stand in front of the Swedes was the grenadier regiment of Repnin's Division. It held the bridge for around half an hour, lost 23 dead, 61 wounded, and 68 missing (the highest toll among Repnin's regiments) and retreated having spent its ammunition and seeing no support from the rear. It was probably there that Major-General von Schweiden was killed – Russia's most senior casualty in that battle.

A noteworthy detail about the Swedish tactics employed in this episode was revealed by Swedish General-Adjutant Kanifer, taken prisoner later in 1708 near Vitebsk. He shared that he accompanied King Charles at Holowczyn where the King led his infantry to where the Russian infantry stood steadily. Charles initially intended to order his soldiers to fix bayonets and charge, but a guards colonel advised that they give volley first; thus after several volleys the Russians stepped back to the bridge and then retreated to the forest.[15]

When the Swedes crossed the morass and marched around Repnin's fortified positions, the Koporsky regiment in its place found itself in a narrow spot amid forest, so that the 1st battalion stood in the rear and the 2nd in the front line in sight of the advancing Swedes. Colonel Golovin resolved to attack to buy time for other regiments to retire. General John Chambers arrived and

12 *Gistoriia Sveiskoi voiny*, Vol. 1, p. 286.

13 Captain James Jeffreyes's Letters to the Secretary of State, Whitehall, from the Swedish Army, 1707–1709 / Ed. by R. Hatton in *Historiskt Magasin. V. 1. Historiska Handlingar*, 35/1. Stockholm, 1953, pp. 1–93. Quotation in: Paul Bushkowitch, Paul. *Peter the Great: The Struggle for Power, 1671–1725*, (Cambridge University Press, 2001), p. 285.

14 The very detailed study of this after action investigation with numerous interrogations of officers and men was published by A.Z. Myshlaevsky, in his *Severnaia voina, 1708 god: ot reki Ully i Bereziny za reku Dnepr* [Northern War, year 1708: from the rivers Ulla and Berezina to another side of the River Dnieper]. (SPb, 1901).

15 Trudy IRVIO, T. 1, p. 146.

approved the plan. Golovin instructed the commander of his 2nd battalion, Lieutenant-Colonel von Sieber that two hindmost ranks were to fire first and that all men fixed bayonets. (Note that per traditional fire by ranks every rank fired in succession; two rear ranks firing at once in a way resembles Swedish tactics). The battalion had already advanced 50 paces towards its foe when division commander General Repnin arrived and ordered a halt and retreat; he was clearly in a panic, because all of his regiments except for the grenadiers had not fired a single shot by then. The order to retreat 'as you can' definitely affected the morale of his troops. Von Sieber's battalion remained in the rear, and being pressed by the Swedes ended up losing order and infiltrating the forest to escape and later gathering again on a road.

Five other of Repnin's regiments stood in their initial position behind the retrenchment for two hours after the battle started. They were only spectators, because the enemy was at first out of sight and then out of range, and because there were no orders to do anything. Finally General Repnin arrived, and after he stopped the advance of Koporsky, he now came to order them the same to retreat. It should be noted that the position had a morass to the rear and it was troublesome to withdraw via the few small bridges the regiments had in their rear. Nevertheless Ryazansky, Vyatsky and two thirds of Narvsky withdrew first and fast; Lefortovsky and Rostovsky remained in the face of the approaching Swedes. Lefortovsky together with one battalion of Narvsky, that broke away from its other two battalions, exchanged fire with the Swedes across the morass that separated them. The skirmish was brief, according to interrogation of Colonel Munsterman, some of his men fired one or two rounds and some none at all, it was irregular fire that the court-martial conclusion named 'Cossack-style fire'. Lefortovsky first sent back its regimental guns and flags and then withdrew under cover of dragoons. The last unit to quit the field was Rostovsky under Colonel Myakinin, it too sent its guns to the rear but retained its flags. When the enemy caught up, Rostovsky faced about and met the Swedes with three volleys fired by ranks (per Major Larionov's account only three companies fired due to the narrow open space). The ground they marched upon was sometimes marsh and sometimes covered with trees, so the regiment inevitably lost order but kept firing even in confusion. After all were in disorder they ran into the forest where the Swedes did not pursue and where the Russians rallied around their flags.

A defeat of the Swedish infantry in the open occurred in the combat of Rakvere in August 1708. When Fedor Apraksin had both his dragoons and infantry on the field, he formed his line and advanced towards the enemy. As the sides approached to within around 40 metres of each other, the Swedish infantry gave fire and faced around in an attempt to fight in retreat; their horse fled and the Russians advanced to finish the enemy infantry regiment.[16] The Swedes were badly outnumbered but their behaviour illustrates that the clash of arms and mutual fire was not a prerequisite part of a battle when one of the two sides preferred to evade contact. Apraksin's foot in this case seems to have been prepared to reserve its fire until the range was shorter.

16 *Pisma i bumagi*, T. 8, 2, p. 642.

If an encounter was not resolved by an impetous charge or several successful volleys, the sides indulged in time-consuming exchange of fire. The battle of Dobroye, as mentioned, lasted two hours and included mainly musket fire. The battle of Lesnaya was unique in this respect as it was a whole day's action where both sides shot and charged a lot, troops even took time to rest in the middle of the day when adversaries became exhausted; neither side was able to force their foe from the field until the Swedes retreated. Krekshin's fiction contains a rather poetic account of the fight with some details that may (and may not) describe the nature of a long infantry fire exchange:

> They stood the whole day in the fire with the enemy, but did not mix their ranks and did not abandon their post; four times because of the shooting the muskets heated so much that it was impossible to handle them; four times they filled cartridge boxes and pockets with cartridges; the gound behind the line was barely seen under layer of bullets.[17]

The culminating moment of the war finally saw both armies in the presence of both monarchs encounter in the open field in a general pitched battle. It was during the second phase of the Battle of Poltava that the Russian infantry left their fortified encampment and formed two lines in the open in front of the Swedes, who launched their traditional *gå på* attack, so often effective prior to that. Nor was it unusual for the Swedes to attack the outnumbering enemy. It is true that Tsar Peter managed to gather overwhelming superiority in numbers and in artillery at the moment of the clash. Still, it is interesting to look up lesser-known sources and to see what happened because it was at this rare moment of the war when both armies performed what were pure linear 'Lace Wars' tactics. General Hallart, commanding his division on the left flank, reported that both armies advanced on each other and when they closed to 15 paces Hallart with his infantry 'won the advantage of first fire and then delivered second volley', after which they pushed forward with bayonets while on the flanks cavalry and infantry successfully attacked the enemy.[18] In another part of Hallart's account he stated that after the Russians fired they fixed bayonets and charged, however the Swedes had fired twice before they fled.[19]

On the right flank, however, Peter Lacy – then Brigadier in the first line – asked the Tsar whether to fire first or wait until the Swedes fired. According to the anecdote that Lacy told about himself, the Tsar replied that they should receive enemy fire and then return a good volley.[20] The two opposing lines closed up not in strict parallel lines – the Russian left first engaged the Swedish right, then all the length of the line became involved. The popular story about the Novgorodsky 1st battalion which fled and about the Tsar who in person led the 2nd battalion from the second line to restore the first line does not seem reliable, as it comes only from Krekshin's 1753 fiction and is not supported

17 *Trudy IRVIO*, T. 3, p. 275.
18 *Neu-eroffneter Welt- und Staatsspiegel* (Haag, 1709), s. 132.
19 L.N. Allart, *Istoria Petra*. OR RNB, F. 885, No. 314, p. 79.
20 *Arkhiv kniazia Vorontsova* (Moscow, 1882), Vol. 26, p. 399.

103. The Battle of Poltava. (Russian School; unknown artist)

with any other sources. Official Russian sources would never omit to mention how the monarch led a bayonet charge at the critical moment; all the relations and accounts keep silence about it however. Unlike Charles XII in many other battles, the Tsar did not fight in the front rank, however he was definitely with the first line and within reach of Swedish shots: relations mention that his hat, his saddle, and his gorget were hit by bullets and a 4 pdr cannonball flew by him (do not ask how they knew the calibre of a flying ball).

Swedish sources mention that the Russian infantry formed a square to protect their left flank from attack by the Swedish cavalry, but no Russian sources mention this square at all. They do not mention anything but exchange of fire and a consequent successful bayonet charge, and do not confirm Swedish accounts of the initial success of the Swedish guards that pushed the Russians back; one may only guess to what extent this was an accurate observation or whether it was affected with a natural, be it conscious or unconscious, intention to improve impressions after the defeat. Nor it is probable that the eventual victors would not go into details of their minor pushback even if it did take place. The detailed and dramatic description by famous Swedish author Peter Englund of how six Petrine infantry regiments retreated before the Swedish guards' charge does sound somewhat overstated. An infantry line of the period could hardly just turn around and march backwards with the enemy close at their back; they would flee and overrun the second line, something that would have a disastrous effect on the army, and that did not happen that day. On the contrary, Hallart's division on this flank suffered rather modest losses that day. The first line thus managed to withstand the Swedish charge (unlike other occasions earlier in the war), repel it with fire (dreadful musket volleys together with cannonade at close range showed the high discipline developed by then) and a counter-attack with cold steel (probably the first time ever for Russians in a pitched battle). The second line of the Russian infantry did not take part in the first encounter but probably did participate in chasing the routed Swedes, for the Nizhegorodsky Regiment that stood in the second line had captured two enemy flags by the end of the battle. It is true that the Swedish mission was nearly impossible: their only infantry line was twice weaker than the Russian first line, had wide gaps between battalions, and had no artillery support, and their cavalry on the flanks did not catch up in timely fashion. Charles relied on impetus, which gained him victories before but it did not work out now. The hot fight lasted two hours according to Russian sources, which probably covers the duration of the pursuit until the Swedes left the field. The mutual advance, exchange of volleys and counter-attack probably took no more than half an hour. One can hardly reconstruct in all details what was happening after the first clash; lines must have broken and battalions and squadrons acted less orderly. In the pursuit Petrine soldiers chased Swedes, thrusting them with swords, bayonets, and pikes until they reached the forest where the Swedes started their advance early in the morning.

Peter is often criticised in historiography for not pursuing the routed enemy to the end. Indeed, after the Swedes cleared the field of battle, the Russian army stopped and spent some time burying the dead and commemorating the victory. This gave the Swedes the time to collect their train and to march

104. First phase of Battle of Poltava. Fragment. Note rectangular fortified camp with infantry to both sides; the T-shaped system of redoubts where cavalry in three ranks fights the Swedes; the fictional view of the town of Poltava that in reality never had such a European-like bastions, spears or bell-towers. Print by Nicolas IV de Larmessin (1684–1753) after painting by Pierre-Denis Martin the Younger (1663–1742)

towards Perevolochna on the River Dniepr where several days later all their army but the King, with an escort, surrendered and became prisoners of war. In an attempt to explain Peter's pause after the victory professor Krotov, who studied the Tsar's personal library with many modern and ancient military treatises, shows that following the recommendations of Montecuccolli, Vegetius and Byzantine Emperor Leo VI who warned against all-out pursuit, Peter was not going to give Charles another chance. The scholar brings up concept of the 'Golden Bridge' for the fleeing enemy: it was considered safer to let the routed enemy escape rather than to press him to the wall and suffer more unnecessary casualties or even face unpredictable outcome.

The further course of the war provides very few examples of two opposing armies clashing in a pitched battle. The battle of Napue (Storkyro or Isokyro in Swedish and Finnish, or Lapola in Russian historiography, or the battle of Vasa in Russian period documents) was fought on 2 March 1714 in Finland between the armies of Lieutenant-General Mikhail Golitsyn and Major-General Karl Gustav Armfelt. It is considered the last large-scale encounter of land forces before the end of the war. The two adversaries' infantry lines advanced on each other over deep snow, doing their best to preserve order and formation. The two available Russian accounts of the battle differ in detail but still provide valuable information for someone interested in actual battlefield behaviour. Per Golitsyn's relation, the Swedes came to within fusil distance of the Russian infantry; the Swedish right wing gave fire by ranks, one round per rank, and without waiting for the return fire charged and outflanked the Russian left wing – this success was mitigated by the moving forward of the Vyborgsky Infantry battalion and two squadrons of the Vologodsky Dragoons from the second line. Meanwhile, action on the other flank was more static: the Swedish left wing fired by ranks (three rounds per rank) and gave three volleys. The Russian right flank in front of them fired by ranks (four rounds per rank) and then three rounds in advance, after which the Russian cavalry rode forward and made both Swedish flanks

105. Second phase of the Battle of Poltava. Fragment. Note that the infantry was shown by the French artist in a French way, in five ranks; Russian battalions would form in four ranks. De Larmessin, after Martin.

retreat.[21] A less detailed official relation read that the Swedes gave a volley of all four ranks and then charged bayonets; the Russians withstood the fire, waited until the enemy came closer, fired and then 'stabbed with bayonets'.[22] This short version clearly omits the temporary success of the Swedish right, mentioned by Golitsyn. We can conclude that a furious hand-to-hand fight did take place. Alexey Lbov, Ensign in Nizhegorodsky, recorded in his autobiography that in that battle he received numerous bayonet wounds in his right hand and right side – something that would not happen if a battle was decided by firepower only.

One may note that if methods of fire are mentioned in accounts, it is fire by ranks as a rule. Platoon fire – despite the Tsar writing of it as a preferable

21 *Severnaia voina. Dokumenty 1705–1708*, pp. 329–333.
22 *Kniga Marsova* (1766), pp. 185–186.

method – is never mentioned in after-action reports; it does not necessarily mean it was not used, but a certain trend is obvious.

The use of bayonets in the field was probably influenced by the Swedish manner: a close-range volley was to precede the charge. It remains an open question whether troops started the battle with their bayonets fixed, as became the norm later on. When at Holowczyn Colonel Golovin intended to attack, per instructions he gave we can tell that a formation was first to give fire and then to charge with bayonets – at least, a special order made sure they were fixed. And if the actual attack did not happen in 1708, this pattern worked well at Poltava and Napue. Troops were to march without haste in a battle, according to the 1706 instruction. However *The Rules for the Battle* read that if one suffered from enemy cannons one should attack them as fast as possible because the closer the guns the less harm they inflict – this was adhered to in the combat of Friedrichstadt in 1713 when attacking a Swedish battery.

Infantry on Horse

At times it was necessary to make foot soldiers more mobile. In June 1704 when scouting from the besieged Narva towards Rakvere in search of the Swedish relief corps of Schlippenbach, Colonel Ronne had six dragoon regiments and infantry on horses and on carts. They were 500 men from Ingermanlandsky and Butyrsky, and 60 guard grenadiers. In autumn 1706 a hundred fusiliers and 200 grenadiers of the guards were sent on reconnaissance parties from Mogilev on horseback. In 1706 the Tsar ordered that a company of soldiers from the Narvsky Infantry was mounted and attached to the Field Foreign Chancellery under Count Golovkin (who was colonel of the regiment); its officers were sent as diplomatic couriers to Austria and Hungary and in 1708 this company performed reconnaissance in the battle of Holowczyn.[23]

Peter travelled a lot across his empire and across various war theatres, and he needed his Life Guards with him. In early 1707 Preobrazhensky was hastily moved across Belarus, and for the sake of speed every three soldiers were given a cart. Later the same year the Tsar issued an order to provide the guards with riding horses, thus transforming them into dragoons. Preobrazhensky first battalion, and grenadier and bombardier companies were the first to receive mounts and riding equipment – they were to follow Peter on his planned journey to Poland. Other battalions, and Semenovsky, eventually received all the dragoons' outfit: high boots, saddles, bandoliers, pouches, broadswords, pistols in holsters etc. Elite infantry regiments such as Ingermanlandsky and Astrakhansky also received horses to take part in raids together with the Guards.

Foot soldiers with horses could not become true cavalrymen either in horsemanship or in taking care of horse. When it was possible, such infantry were stationed together with dragoon regiments so that they could learn the cavalry trade from professionals. Besides this, 300 irregular Tartars and Mordva were attached to both Guards units in order to look after the horses.

23 *Ofitserskie skazki pervoi chetverti XVIII veka. Polevaia armiia. Sbornik dokumentov. Sost. K.V.Tatarnikov* [Officers' autobiographies from first quarter of 18th century. Field army. Collection of documents. Compiled by K.V. Tatarnikov], (Moscow, 2015), T. 2, pp. 1842, 1849.

Moreover, they received camels as pack animals for carrying loads instead of carts: four camels per fusilier and six per grenadier company.[24] The attrition of horses was probably considerable – at the end of 1709 Peter ordered that 2,500 horses were borrowed from Moscow townsfolk for the Guards' triumphant entry to the capital city.[25]

Despite the Guards being mounted since 1707–1708, in fact they never fought on horseback. They arrived, then dismounted and acted like infantry while still wearing their cavalty equipment. Only once they rode into battle in the saddle: in 1712 General Bauer with dragoons and with both mounted Guard regiments attacked and defeated the Polish force of Grudzinski near Wrzesnia (in Russian relations referred to as the Battle of Lagorew on the River Varta). In 1713 the Guards stopped their mounted service, for the army entered a period of war when troops mainly operated on the sea.

Nevertheless, the higher mobility of mounted infantry and its joint operations with dragoons made it an excellent fit for the concept of flying corps. *Corps volante* in French, transformed into *korvolant* in Russian, was defined in the period *English Military Dictionary* as 'flying camp': a large body of horse or foot usually under the lieutenant-general which was always in motion to both cover friendly garrisons and keep the enemy army in continual alarm. According to the Russian 1716 Code, the *korvolant* was a 6,000–7,000-strong force detached to reconnoitre enemy movements or to cut off his way to retreat, or to raid and ravage his lands. A force would have light guns and ideally no train carts at all, for a heavy train always hindered fast movement of troops.

The concept of an autonomous horse detachment was probably well known in native Russian military long before a new French word arrived to denominate it. The term *korvolant* seems to be more common for historiography, however: one rarely finds it in period sources. The most well known Petrine use of *korvolant* is the Battle of Lesnaya when, while the main army anticipated the invasion of Charles XII, Peter gathered an ad hoc corps of 10 mounted infantry battalions and 10 dragoon regiments that spotted, chased, and attacked the Swedish separate corps of General Lewenhaupt. Scholars sometimes apply the term *korvolant* to Menshikov's all-dragoon corps that won the Battle of Kalisz in 1706, and to Sheremetev's 1705 corps with predominant cavalry.

In the battle for the village Rashevka in Ukraine in February 1709, Field Marshal Sheremetev had to swiftly send troops and attack the village, where an isolated Swedish detachment was spotted. He had dragoons that could support the action but were ill-mounted and had too many recruits to fight in the first line; he had infantry that could not march fast enough to the place. So the only choice was mounted guards who rode all night, arrived, dismounted, and attacked just in time before the Swedes withdrew or received support. The 4th battalion of Preobrazhensky with the grenadier company of the Astrakhansky Regiment at the head, led by Major Bartenev, charged the front while the 2nd battalion with a half-company of Guard grenadiers under Major Matyushkin marched to outflank the enemy. The

24 P.O. Bobrovskii, *Istoriia leib-gvardii Preobrazhenskogo polka*, Appendix 2, p. 59.

25 *Sbornik IRIO*, T. 11 (1873), p. 128.

action was victorious, the Guardsmen broke through line of *chevaux-de-frise* that surrounded the place and was defended by the Swedes, and chased the enemy into the village where it all was over. Besides this, local Ukrainians rose in arms against the Swedish garrison. Swedish Colonel Albedyhl was taken prisoner and most of his dragoon regiment captured or slaughtered, and thousands of Swedish army horses were captured also. Five or six Russian dragoon regiments under Major-General Böm stood behind and did not take part in the fight. The casualties were not inconsiderable for Preobrazhensky, however: they lost 14 killed and 57 wounded, and Major Bartenev died of wounds. This made the Tsar very angry at Sheremetev, for he did not spare the Guards and lost one the best Guard officers. The Field Marshal responded to the accusations by saying that he had no other mobile and battle-ready troops at hand to complete the mission.[26]

Cavalry

When we think of pitched battles or smaller fights of the war we may find that probably encounters of two cavalry forces in the open happened more often compared to infantry combats. We shall gather here accounts that provide educating particularities of cavalry fights of the war.

The fire from horse – pretty much within the tactical doctrine for the European cavalry of the 17th century – was not only described in the early Petrine cavalry manual but also seems to have been universally adhered to by cavalry commanders, as far as we can tell from the few accounts that mention combat methods. For example, in the battle of Erastfer on 9 January 1702, the first considerable victory of troops under General Boris Sheremetev over the Swedes of Wolmar Anton Schlippenbach in Livonia, the Russian dragoons 'upon fired volley proceeded to their swords.'[27] In the battle of Szkudy in Lithuania on November 12 04, 'the Muscovite dragoons allowed [the enemy, Swedish and Lithuanian horse] to come close and gave a very hot fire.'[28] This routed the attackers and led to the victory of Lithuanian-Russian allies under Prince Mikhal Koribut Wisniowecki; the dragoons in question were 1,000 chosen men from six regiments under Major-General Ronne. The battle of Gemauerthof on 26 July 1705 was lost because of poor control of senior dragoon officers who endeavoured to charge without command and then allowed their men to loot the enemy train before the action was over – the cavalry was overthrown and ran onto friendly infantry, bringing it into disorder. The Tsar concluded that this happened due to poor training of dragoons, and noted that he had warned Sheremetev about it a number of times.[29]

At the same time in some armies of the period, European shock cavalry tactics were propagated, the Swedes of Charles XII and English of Marlborough

26 *Trudy IRVIO*, T. 3, pp. 95, 102, 105-106; *Pisma i bumagi*, T. 9, 1, p. 107, T. 9, 2. pp. 719–721; Adlerfeld. Vol. 3, pp. 100–101; *Gistoriia Sveiskoi voiny*, Vol. 2, p. 437; Bobrovskii, P.O., *Istoriia lieb-gvardii Preobrazhenskogo polka*, Appendix 2, p. 11.

27 G. Gizen [H. Huyssen] 'Zhurnal Gosudaria Petra I s 1695 po 1709' [Journal of Peter I 1695–1709], p. 278.

28 *Pisma i bumagi*, T. 3, p. 713.

29 *Ibid.*, p. 388.

to name the most evident examples. Tsar Peter had probably appreciated the advantage of this approach and in his 1706 instruction he wrote: 'The horse should not shoot before the enemy is brought into confusion with God's help, but they should advance on the enemy with solely swords.'[30]. That means that Petrine dragoons were to adopt Swedish tactics. Nevertheless, shooting training remained mandatory for dragoons and in 1711 Peter ordered that Sheremetev have dragoons learn firing both on foot and on horse.[31] Several accounts describe that Russian dragoons first fired and then drew swords to charge in 1709 in combats in Poland,[32] and Ukraine;[33] or they preferred a firefight in the battle of Odolyanuv in Poland in November 1709.[34] A first hand account of Poltava by Swedish General-Quartermeister Gyllenkrok describes three Russian squadrons that rode with their muskets on their right hip, gave fire upon Swedish cavalry at 60 paces and rode on to the side without charging, they thus maneouvered around the Swedes to give fire from different sides.[35] The known expenditure of ammunition on the day of battle in the cavalry regiments clearly shows that they fired a lot at Poltava.[36] The Moskovsky Dragoons fired 13,337 fusil and 3,700 pistol rounds; given the unit was 781 men strong, every dragoon fired off roughly 17 fusil and four pistol rounds. Andrey Kropotov's Horse Grenadiers spent 34,040 fusil rounds, hurled 120 grenades and burnt 716 fathoms of slowmatch. Two other units fired less, as far as we can tell from the known overal amount of lead: the Novotroitsky Dragoons spent 274 kg of lead, which gives roughly eight rounds per each of their 963 men. Tverskoy's 667 dragoons fired on average four rounds per man or 82 kg of lead.

One finds some insightful details of a horse combat in the materials of interrogation after the defeat of Holowczyn in 1708. In this battle the infantry retreated when the dragoons were far from the point of Swedish attack; the cavalry advanced, with considerable delay, to take part in the closing stage of the battle when the Swedish cavalry was already on the Russian side of the river. First to fight was brigade of Major-General Inflant: a piquet of Major Oblov (200 men from Pskovsky and Tverskoy Dragoons) met two Swedish squadrons, 'fought as long as was possible' and fell back upon the Tverskoy

30 *Pisma i bumagi*, T. 4, p. 391.

31 A.Z. Myshlaevskii, *Voina s Turtsieiu 1711 goda. Prutskaia operatsiia. Materialy, izvlechennye iz arkhivov* [War with Turkey in 1711. Prut operation. Materials from archives]. (SPb, 1898), p. 22.

32 'God iz tsarstvovaniia Petra Velikogo. 1709. Iz zapisok Krekshina' [A year of Peter the Great's reign. 1709. From notes of Kerekshin] in *Biblioteka dlia chteniia*, T. 97, 1849, Otd. III, p. 74.

33 'God iz tsarstvovaniia Petra Velikogo. 1709. Iz zapisok Krekshina' [A year of Peter the Great's reign. 1709. From notes of Kerekshin] in *Biblioteka dlia chteniia*, T. 97, 1849, Otd. III, p. 65; Trudy IRVIO, T. 3, p. 270.

34 P.N. Krekshin, *Zhurnal velikoslavnykh del velikago gosudaria imperatora Petra Velikago*, Tom 28, 1709 [Journal of glorious deeds of Emperor Peter the Great, Vol. 28, 1709], (OR RNB, F 588, Op. 2, D. 1732, p. 95).

35 *Sovmestnyi vypusk Voenno-istoricheskogo zhurnala i zhurnala Staryi Tseikhgauz, posviashchennyi 300-letnemu iubileiu Poltavskogo srazheniia* [combined issue of Military-Historical Magazine and Staryi Zeughaus Magazine, dedicated to the 300 anniversary of the battle of Poltava], 2009, p. 107.

36 N.P. Polikarpov, 'O voiskovykh chastiakh, prinimavshikh uchastie v Generalnoi batalii pod gor Poltavoi 27-go iiunia 1709 goda po arkhivnym izyskaniiam' [About units that took part in the general battle of Poltava as per archive studies] in *Voennyi sbornik*, 1909, 4, pp. 36–41; 5, pp. 50–59; 6, pp. 68-79; 7, pp. 88–99; 8, pp. 100–115; 9, pp. 116–132.

regiment that came up. Colonel Rozhnov with a grenadier company and two squadrons of the Tverskoy 'gave fire and charged', and in the ensuing melee – with, reportedly eight Swedish squadrons – they were surrounded and rescued by a timely charge of the Pskovsky Dragoons.

The Belozersky Dragoons, from the brigade of Weisbach, marched with the grenadier company at the head; the grenadiers charged and were thrown back. Other squadrons formed a line and Major Esmont ordered his 1st squadron to give fire; men of the 2nd squadron followed the example and started firing without command, Captain Stein of this squadron saw that the distance was too big, around 140 metres, and asked his men in Russian (which was difficult for a foreign officer), for God's sake to stop shooting. This did not help, and two other squadrons opened irregular fire from afar. At this point the officers lost control of the regiment, and once the Swedes charged Belozersky was routed. In their flight the dragoons rode over the Peterburgsky Dragoons with the regimental guns that came as support. The entire mass became confused and retreated; troops occasionally stopped and faced about to give fire, but were not willing to charge any more.

The last to fight was the column of Prince Hesse-Darmstadt, which marched to the sound of battle along the narrow forest road. When entering the small field the Troitsky Dragoons at the head of the column noticed Swedish squadrons waiting in battle array. Hesse-Darmstadt hastily ventured to form his marching column into line, but the Swedes charged first when only the grenadier company and two squadrons of Troitsky were ready in the first line. This small advance guard being outflanked, all the column withdrew in disorder.

The defeat costed overall 221 dead, 376 wounded and 220 missing dragoons, two flags (Pskovsky and Belozersky), a pair of Troitsky kettledrums and two cannons. Thus Petrine cavalry commanders at Holowczyn did so bad that Field Marshal Goltz and his officers Inflant, Heinske and Hesse-Darmstadt were brought to court-martial. Three regiments, Peterburgsky, Belozersky and Troitsky, were disbanded later in 1711–1712, and scholar Myshlaevsky considered this was a delayed punishment for their behaviour in this unlucky action.[37]

Although cavalry sword fights were not described in period regulations, they definitely did take place on various occasions. At the battle of Sokolka on 23 April 1709 General Ronne managed to meet and repel a surprise attack of Major-General Creutz with Swedish cavalry and Zaporozhians. Having received short notice of the coming attack, Ronne had barely formed 1,500 of his 3,000 dragoons and hastily led them to face the enemy. Creutz had approached with all his cavalry in battle line; Ronne saw that he could not put anything against the enemy's flanks, so he ordered that his companies one after another charged the Swedes with broadswords. The leading company gave one volley, then charged, cut one Swedish company to pieces and broke through the Creutz line; parts of it were then attacked in flanks

37 A.Z. Myshlaevskii, *Severnaia voina, 1708 god: ot reki Ully i Bereziny za reku Dnepr* (1901), pp. 153–168.

and routed with heavy loss.[38] The victorious after-action report, albeit sounding overstated as usually was the case, nevertheless finds confirmation in a Swedish account of Colonel Nils Gyllenstierna whose dragoon regiment was soundly defeated and lost more than half its men in that action.

Danish envoy Georg Grund reported that the Tsar had more difficulties with the regular establishment of his cavalry than his infantry, because all their horses were too wild for firing from horseback; as to cold steel, Russians always preferred to cut rather than thrust which led to larger gaps in the rank and thus their squadrons could easily be overthrown.[39] Another foreign observer reported that Tsar Peter enthusiastically argued that cavalry should cut in a Russian style rather than stab in the Swedish style.[40]

The experience of the war years revealed certain issues in the combat behaviour of the Russian horse. If at an exercise ground all the movements were carried out per word of command, it was much more difficult to control troopers in the heat of battle. 'The articles for the time of military campaign' issued in 1703–1704 warned that 'horse commanders should observe that they do not run boldly into the enemy's mouth.' Peter's 1706 instruction also warned against dashing and chaotic charges and requested that the advance was gentle and orderly. *The Rules for a Battle* also emphasised the hazard of pursuit and the importance of keeping a formation: 'There is no need that our cavalry chases the enemy too far; they must, after breaking the enemy, gather in squadrons again and march in order, awaiting orders of their commanders. They can send only small detachments to pursue the enemy, and the rest should form immediately.' It was probably not a rare occasion when troops rushed forward voluntarily: 'I saw in the last action that many squadrons advanced against the enemy without command, for no other reason than they saw that other units advanced. When one line is given command to attack, there is no need for the other line to follow the first without command.'[41] The abovementioned issues clearly undermined the effectiveness of cavalry, they also abused what we may call the aesthetics of the linear tactics – something that officers learned in theory but relatively rarely saw in reality. This may expalain the admiration of Menshikov when he wrote to Tsar Peter about the battle of Kalisz in 1706: 'There were no such battles before, and I was happy to see both sides fighting in a regular way; it was amazing to see the field covered with dead bodies.'[42]

The dragoons in the European military originated as mounted infantry, hence they were to be able to fight both on horse and on foot. The 1701 Brief Regulation describes only horse exercise, but officers' autobiographies do mention that in 1702 the new dragoon regiments learned 'soldiers' articles' i.e. foot training.[43] As to the actual combat use of foot dragoons, we know

38 *Gistoriia Sveiskoi voiny*, Vol. 2, p. 438.

39 G. Grund, *Doklad o Rossii v 1705–1710 godakh* [Report about Russia in 1705 - 1710], translation and comment by Bespiatykh Iu.N. (Moscow, SPb, 19920, p. 104.

40 Iu.N. Bespiatykh, *Inostrannye istochniki po istorii Rossii pervoi chetverti XVIII veka* [Foreign sources on the history of Russia in the first quarter of the 18th century], (SPb, 19980), p. 219.

41 *Pisma i bumagi*, T. 8, 1, pp. 6–13.

42 *Ibid.*, T. 4, 2, p. 1196.

43 N.P. Volynskii, *Postepennoe razvitie russkoi reguliarnoi konnitsy*, T. 1, p.144.

that they defended the line of circumvallation at Narva in 1700 along with the infantry, others dismounted to attack the fortified farmstead Menza in Livonia in August 1702.[44] Marching on foot was necessary to pass through a narrow defile, as at the battle of the River Sestra (Systerbeck) in 1703. Colonel Ronne at the head of four dragoon regiments rushed forwards away from slow marching Guard infantry, and dismounted to pass through a forest passage; having entered an open field the dragoons mounted, attacked, and defeated the Swedish corps of General Kronhjort which advanced to what would become St. Petersburg from Vyborg before the Guard infantry caught up. In the battle of Kalisz in 1706, Menshikov wanted foot troops to cope with a Swedish infantry square and his dragoons dismounted to complete the task.[45] In the same year a Russian corps in Saxony retreated to the Austrian border along a forest road being pursued by Swedish cavalry. The rearguard consisted of 500 dragoons of Major Ropp: they dismounted, constructed an abatis and held the Swedish advance for a whole day.[46] When in 1708 Swedes of Lybecker crossed the River Neva near Tosna, Russians at the place of crossing initially had only 300 dragoons who dismounted and attacked the enemy that already reached their side (after three hours the fight was lost and the outnumbered defenders retreated, having suffered fewer casualties than the Swedes).[47] In a secondary theatre of war in Poland in May 1709 in a fight against Sapieha's Horse, Field Marshal Lieutenant Goltz secured his rear by placing there two dismounted dragoon squadrons.[48] On 26 June 1709 near Poltava Ronne's two dragoon regiments crossed the River Vorskla to the Swedish side, dismounted and stood in concealment, where it then gave great volleys upon the enemy.[49] The day before that, Heinske's Dragoons stormed the fortified Starye Senzhary on foot.[50]

The Petrine dragoons occasionally fought on foot after Poltava too. In preparation for the 1711 Turkish campaign, Peter again ordered the training of dragoons in firing since the Turks were different from the Swedes, and the Russians had to rely on infantry and *chevaux-de-frise*. It must have helped, since during the river crossing the dragoons secured the bridge by dismounting and firing volleys upon the Turks.[51] The dragoons also had a chance to form a square to repel Tartar horse – more on that in the section

44 *Ibid.*, p. 110.

45 *Gistoriia Sveiskoi voiny*, Vol. 1, p. 272.

46 A.I. Grigorovich, *Istoriia 37-go dragunskogo Voennogo ordena general-feldmarnshala grafa Minikha polka* [History of 37th Ordensky Dragoon regiment], T. 1 (1709-1809 gg.), (1907), Appendix 7, p. VIII; Adlerfeld, Vol. 2, p. 267.

47 *Pisma i bumagi*, T. 8, 2, p. 659; Slavnitskii, N.R., 'K voprosu o poteriakh russkikh voisk pri oborone Sankt-Peterburga v 1708 g.' [About the casualties of Russian troops in defence of St. Petersburg in 1708] in *Istoriia voennogo dela: issledovaniia i istochniki* [History of military science: research and sources], 2013, T. IV, pp. 258–264. <http://www.milhist.info/2013/08/14/slavnitskiy_1> (accessed 14 August 2013).

48 G. Gizen [Huyssen, H.] 'Zhurnal Gosudaria Petra I s 1709 po 1710. Polovina vtoraia' [Journal of Peter I 1709–1710] (1788), p. 62.

49 *Ibid.*, pp. 90–91.

50 *Ibid.*, p. 88.

51 A.Z. Myshlaevskii, *Voina s Turtsieiu 1711 goda. Prutskaia operatsiia. Materialy, izvlechennye iz arkhivov* [War with Turkey in 1711. Prut operation. Materials from archives]. (SPb, 1898), p. 249.

106. Von der Ropp Horse Grenadiers in action. Illustration from the regimental history of the 13th Ordensky Dragoons (1912). (Adolphe Charlemagne (1826–1901))

about the use of artillery. In the same year Peter sent corps of Brigadier Yakovlev to his ally August to Pomerania; the Tsar noted that he needed infantry against the Turks while the dragoons all learned infantry exercise and on occasion could fight on foot. After arrival at the first siege of Stralsund those six dragoon regiments sent away their horses to Poland and thus became infantry until they marched to Poznan in spring 1712, where they took their horses back. Some dragoon units also dismounted to skirmish in the attack on Fredrikstad in Holstein in February 1713, and at the siege of Stettin in September 1713. In Finland in August 1713 dragoons dismounted to ford the River Karis and assault a bridge.[52] These cases conform to the instruction that the Tsar issued to the Allied army on 2 February 1713: 'If the enemy posts himself in such places where cavalry cannot act on horse, one should dismount them and seek to attack him with infantry.'[53]

Foot exercises for dragoons were mandatory but at times met natural limitations. After the Battle of Lesnaya Peter ordered Repnin to prepare foot and horse regiments for the next campaign, and especially to teach horsemen in foot service.[54] Repnin replied that although training was now underway, he still wanted quality officers because many commissions were vacant and many officers were 'old and bad'.[55] The dismounted dragoons were thus to substitute infantry but at times they were either not trained enough for it or

52 *Pokhodnyi zhurnal 1713 goda* [Campaign journal of 1713], (SPb, 1854), pp. 11–12.
53 *Pisma i bumagi*, T. 13, 1, p. 39.
54 *Pisma i bumagi*, T. 8, 1, p. 237.
55 *Ibid.*, T. 8, 2, p. 862.

preferred to wait until the arrival of friendly infantry. In the battle of Rakvere in Estonia in August 1708, the dragoons of Fedor Apraksin arrived in front of the Swedish infantry which stood in battle array; 'we could not do anything with them because they had infantry and we did not; so we had to withdraw our dragoons and once our infantry came we formed and advanced.'[56]

According to the rules of combat, the cavalry after every charge was to dress their disordered squadrons. It was in one such pause at the Battle of Poltava when troopers of both sides rushed to their lines, that six Russian dragoons mistakenly placed themselves into the Swedish ranks without noticing what was wrong for some time – this illustrates the mess of the cavalry fight where troopers covered with dust and aired with smoke could barely distinguish friend from foe.[57] The cavalry combat constituted not only shooting and charges with cold steel. There were occasions when two lines stood before each other and undertook nothing, as was the case at the Battle of Kadin (Rayevka) in September 1708. It started with a Swedish attack on irregulars, then gradually regular troops came in to support from both sides; King Charles was in the heat of the melee and after his horse fell he fought on foot. General Bauer reported that after two hours of fire the two armies, separated by a creek, 'stared at each other and stood at a distance of pistol shot, but there was no shooting'; for half an hour the King dressed his cavalry and Bauer at the same time dressed his dragoons, after which both forces rode away.[58]

Artillery

Accounts of combat use of the Russian field or regimental artillery are few. In *The Rules for the Battle*, Peter wrote that foot regiments were to have their regimental 3 pdrs with them; these guns were to stop from time to time and fire caseshot; infantry meanwhile had to reserve their fire. Field artillery of 6- and 12-pounders were to be placed on high ground to fire at enemy; it was to be moved forward in case the battle line advanced.

Despite the generally accepted opinion that Charles' tactics neglected artillery, we have to note that Swedes did employ their artillery with skill. While at Poltava the King intentionally took to the battle only four guns, he or his generals used mass batteries in other occasions. Such, for example, were the crossings of the Rivers Neva and Desna in 1708 where the Swedes suppressed the defenders of the opposing bank with concentrated fire, or the storm of the Narva circumvallation was accompanied with a massed cannonade.

We can tell for certain that unlike the Swedes, the Russians preferred to bring as much of their artillery as was available onto the field. In the Battle of Poltava infantry regiments had their guns within the line.[59] They must have

56 *Ibid.*, T. 8, 2, p. 642.

57 P. Englund, *Poltava. Rasskaz o gibeli odnoi armii* [The Battle that shook Europe – Poltava and the birth of the Russian Empire] (Moscow, 1995), p. 109.

58 *Pisma i bumagi*, T. 8, 2, p. 664; *Gistoriia Sveiskoi voiny*, Vol. 2, pp. 428–429.

59 E.E. Kolosov, 'K voprosu preobrazovaniia russkoi artillerii v pervoi chetverti XVIII veka' [Concerning reforms in the Russian artillery in the first quarter of the 18th century] in *Sbornik dokladov voenno-istoricheskoi sektsii Leningradskogo doma uchenykh im. A. M. Gorkogo* [Compendium of papers of military-historical section of Leningrad House of Scholars], 1, (Leningrad, 1957), pp. 57–62; P.A. Krotov, *Bitva pri Poltave* [The Battle of Poltava] (SPb, 2009);

achieved a high rate of fire for we know the expenditure of ammunition that was fired off in the period between the moment when the two lines started advance and the moment when the Swedish line was overthrown, something like a half-hour span. Repnin's Division had 14 regimental 3 pdr guns and they fired 192 balls and 70 rounds of case shot; Hallart's Division with 13 guns fired 356 balls and 201 rounds of case shot; Menshikov's Division had 10 guns and fired 114 balls and 53 rounds of case shot.[60] Besides, the four regiments in the Guard Brigade had nineteen 3 pdr guns and a 1-pood howitzer; 13 more pieces were in the dragoon regiments.

In a way, information about lost regimental guns could attest for these guns actually saw action. In the lost Battle of Gemauerthof in 1705 Sheremetev's troops lost six guns and seven howitzers although there are no accounts as to whether they were employed in the fight, were captured in combat, or were abandoned afterwards. At Holowczyn some regiments abandoned their regimental guns that were stuck in the forest after the troops withdrew thither from the Swedish attack. These guns, however, hardly fired a single shot in the battle as the regimental commanders sent them to the rear before the regiments started their retreat.

In the 1711 Pruth campaign, the commander of the cavalry vanguard General-Field Marshal-Lieutenant Jahnus d'Eberstett resolved to retreat in front of the enemy horse and the anticipated enemy army. Frenchman Moreau de Brasey, Colonel of Kazansky Dragoons, recorded curious details of the affair. Once Jahnus learned that the overwhelming Turkish cavalry was about to fall on him, he resolved to retreat towards the main army. The general ordered all his men to dismount and form a hollow square. The dragoons on foot formed in four ranks; 32 dragoon regimental cannons loaded with case shot were placed between the second and third rank, thus concealed from the enemy by the two front ranks. Sick soldiers and recent recruits were placed in the centre to hold the horses; horse grenadiers formed the face of a square close to the enemy and were ready to fall on the ground upon command. And when Tartar horse approached and rushed on the square, the front ranks of grenadiers fell down and the 12 guns gave a volley that stopped and repelled the mass of enemy horse. Encircled at a distance and harassed by enemy skirmishers and bowmen, the square thus moved slowly throughout the whole day, stopping from time to time to shoot.

Several days later when defending the fortified camp against Turkish massive attacks, Russian gunners loaded both cannonball and case shot at a time which increased the damaging effect on the deep enemy columns. Eighty-seven pieces of regimental artillery were placed all along the perimeter, heavy field guns remained in reserve and later eight 8 pdrs were brought to the most threatened part of the line. When three guns were hit by Turkish

V.A. Moltusov, *Poltavskaia bitva. Uroki voennoi istorii 1709–2009* [The Battle of Poltava. Lessons of military history 1709–2009] (Moscow, 2009).

60 D.P. Strukov, *Russkaia artilleriia pod Poltavoiu* [Russian artillery at Poltava] (SPb, 1911), pp. 3, 4; D.F. Maslovskii, *Zapiski po istorii voennogo iskusstva v Rossii* [Notes about military art in Russia], (SPb, 1891), Appendix, p. 37.

artillery in de Brasey's sector, the Tsar ordered the repair of the guns and added a 12 pdr from the reserve.

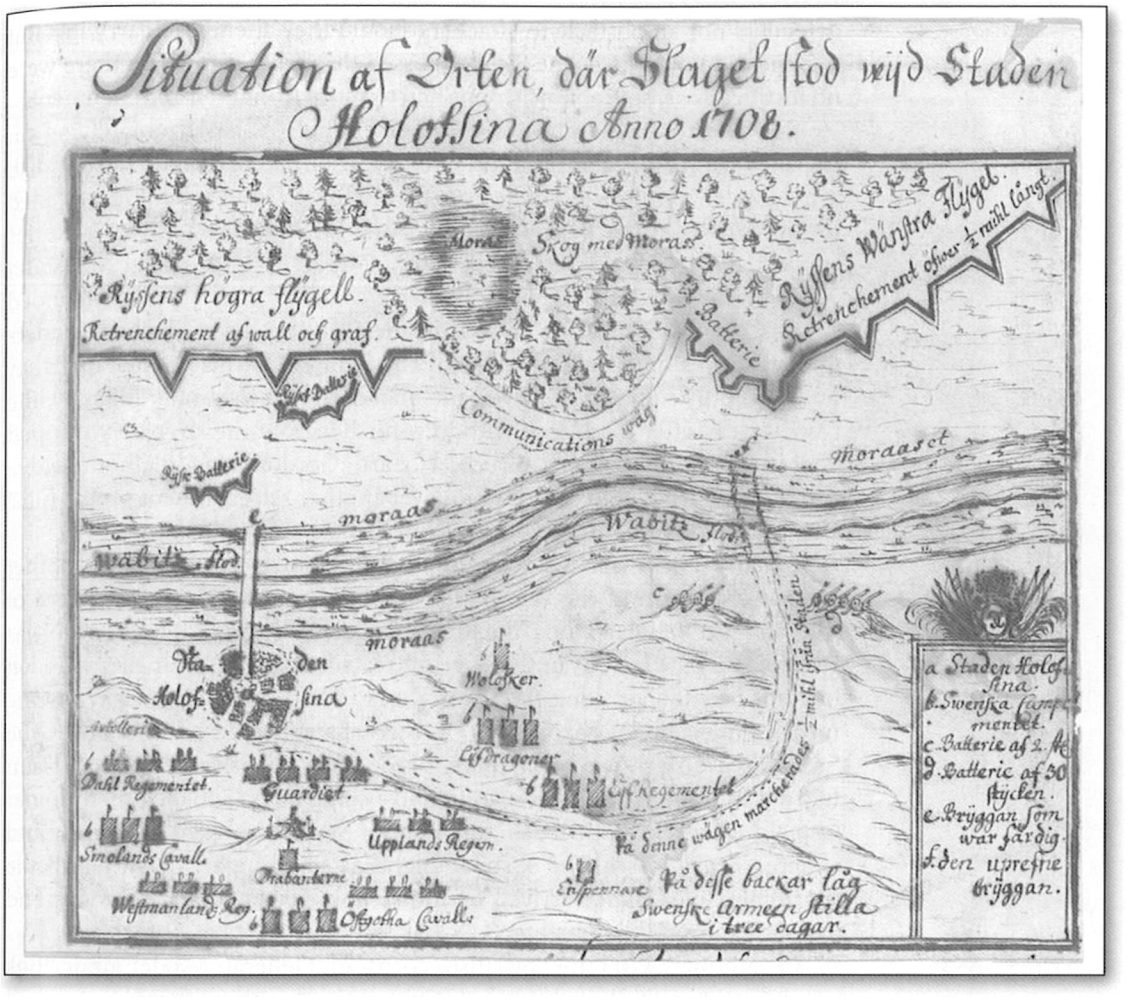
The dragoon regiments did have their regimental artillery in 1701–1705, but their crews were footmen from the artillery regiment. In 1708 Bruce created a detachment of 24 mounted gunners who received all the cavalry outfit (high boots, carbines, pistols, broadswords, saddles).[61] Likewise, cannoniers of the Preobrazhensky Guards rode horses when the unit was mounted. Does this make them the earliest known horse artillery? Some would say yes, however there are no accounts of these guns and crews operating like the horse batteries of the future. The traditional view has Frederick the Great as founder of this arm and the first proper horse batteries in Russia were established in 1794.

Field Fortifications

Military engineer and mid-19th century author Fedor Laskovsky wrote that slowness, cautiousness, and the inclination to defence – all features of the young Petrine army – were to be ascribed to the lack of tactical education among troops and to the enemy's superiority in this respect. In this situation, field fortifications had a greater importance to Russians, he concluded. On the other hand, fortified camps, lines, and redoubts were common for the European military of the period, so Peter and his generals followed the mainstream approach then. The first case in the war for the Russians when they defended a field fortification was of course the Battle of Narva. There, Swedes in two columns attacked the Russian line of circumvallation and broke through. It was subject to discussion as to whether the army should wait within the lines or go out and meet the foe in the open field; the first idea won and Duke de Croy left his troops behind the parapets. The line was almost 10 kilometres long, and even when the Russians were three to four times more compared to Charles' army, they were dispersed along the lengthy retrenchment so that the infantry stood in a single line without reserves, and only two or three ranks deep instead of six per regulation of that time. The Swedish boldness, and their concentration of overwhelming superiority at the points of breakthrough, together with indecisiveness (Commander-in-Chief de Croy arrived recently and was hardly acquainted with his troops; his subordinate Russian generals did not have any feasible experience) and the mistakes of the Russian command (they did not have outposts to inform them in advance about the Swedish attack) made the outcome predictable.

Although there was no other occasion when the Swedes would attack Russian circumvallation after Narva, Petrine generals both foreign and native still displayed their addiction to fortified lines. In 1704 new commander Ogilvy ordered the erection of two lines to refuse the passage of the Swedish relief force from Reval, during the second siege of Narva in 1704; these lines never saw action.

61 S.V. Efimov, L.K. Makovskaia, A.N. Filimon, 'Ia.V. Brius v 1708 godu' in *Arkhiv general-feldtseikhmeistera Iakova Vilimovicha Briusa* [Archive of General Feldzeugmeister Jakob Bruce] T. 4, Letters of J. Bruce 1708. (SPb, 2008), p. 9.



107. Plan of the battle of Holowczyn with the Russian field retrenchments.

When Peter's generals discussed the upcoming 1708 campaign, Field Marshal Lieutenant Goltz insisted that the army should not wait for the enemy attack in retrenchments; this, however, remained in vain. At the Battle of Holowczyn in 1708 Russians found themselves occupying a lengthy entrenchment that was carried by a daring Swedish assault. A court-martial investigated the causes of the defeat and gathered many informative accounts. In an attempt to prevent the enemy crossing the River Babich, Russian generals occupied extensive position along the east bank, their divisions were dispersed and separated from one another as they were unaware of where Charles would cross. Although they spent four days in the position, fortifying it turned out to be a problem. The Repnin Division – the one that was in the end attacked and defeated – first sent men to help build trenches on the other flank, then they were waiting for an engineer to trace a line in their sector of defence, then they started gathering fascines, and as a result they only started their own retrenchment the night before the attack. The parapet was raised only knee high and neither provided shelter for the

defenders nor an obstacle to attackers should they attempt to carry it.[62] But the line did not help, as the Swedes passed through a gap where there were no fortifications, so Repnin's troops had to retire from their retrenchment.

The defeat at Holowczyn did not deter the Russians from relying on trenches again and again. Later the same year on 11 November, the Swedish army on its way to the Ukraine crossed the River Desna near a place called Mezin. On the lower bank of the river the Russians erected two batteries supported by foot and horse under command of Major-General Alexander Gordon. The Swedes, occupying higher ground on their side, commanded the Russian positions and eventually by their artillery fire made the defenders retreat. Peter's official description of the fight reads that the parapet they built was only sufficient to cover one man but not a four-rank infantry line. Nonetheless, after the troops withdrew further from the river they stopped, and Generals Sheremetev, Bruce, Hallart, Gordon, and d'Albon held a council and decided to start building yet another retrenchment on the hills! Then they received order to retreat from thence.

Defence of an isolated redoubt by a handful of soldiers was another dramatic scenario of the war. In June 1701 after the failed Saxon siege of Riga and lost Battle of Duna, the Russian auxiliary corps of Repnin, who was sent to assist the Saxons in the siege, retreated. Small detachments were left behind in redoubts along the River Duna (West Dvina or Daugava). One fort defended by 40 Saxons and 50 Russians surrendered as soon as the Swedish cavalry showed up. Another redoubt of the island of Lutsavsholm had a garrison of several Russian infantry companies (300–400 men) under Captain Alfery Schlippenbach; the superior Swedes attacked vigorously and suffered heavy losses. The obstinate fight lasted all night, and when in the morning King Charles arrived he found only 20 remaining Russians and saved them from the slaughter.[63]

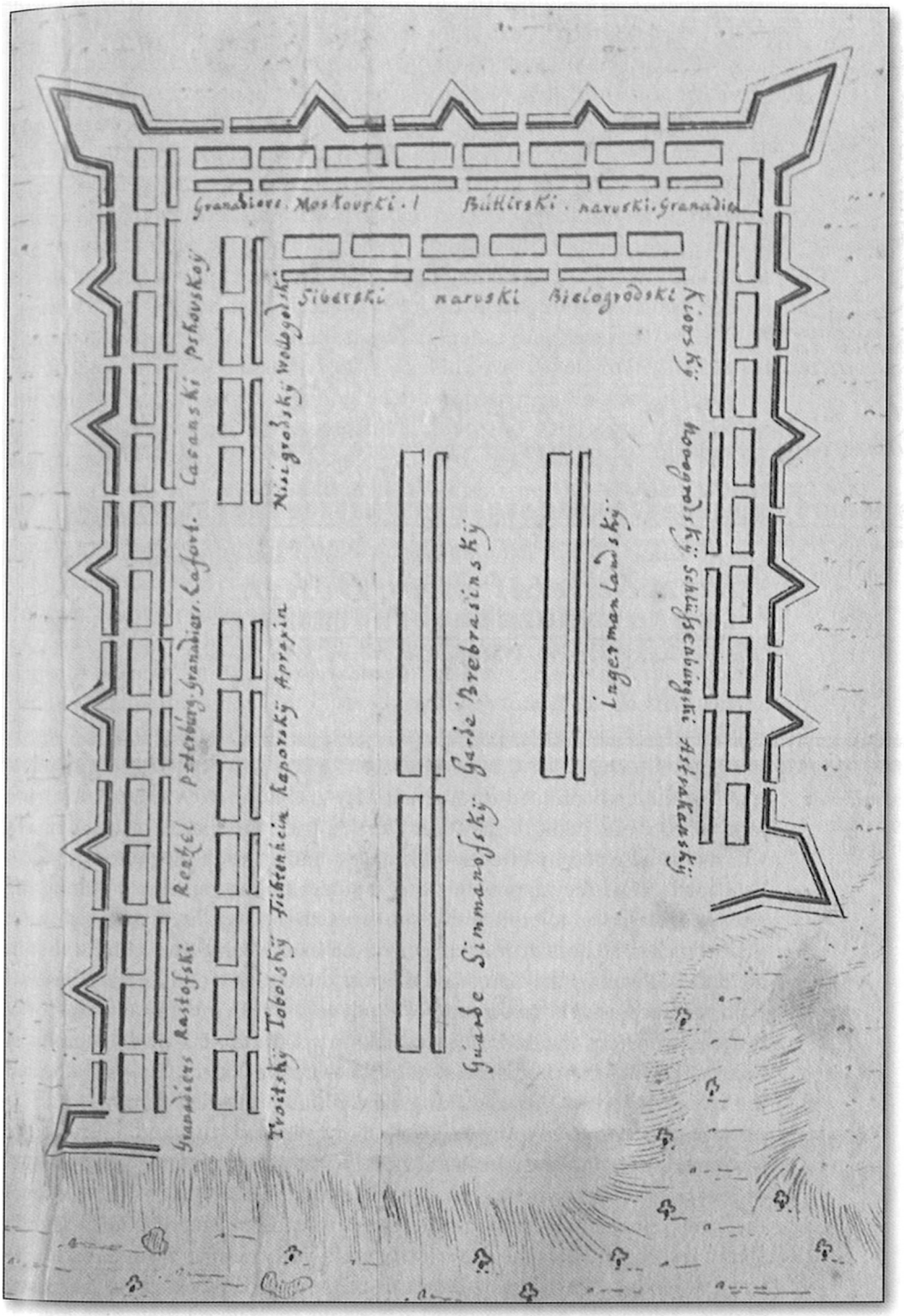
In summer 1705 the Swedish corps of General Maidel undertook another raid on St. Petersburg, but having gained nothing there he marched eastwards along the River Neva towards Schlisselburg (ex-Noteburg). On their way the Swedes found a sawmill on the River Chernaya: the post had an earth rampart, palisade and garrison of two companies who declined an offer to surrender. The Swedes mounted batteries, breached the palisades and launched two assaults that were beaten off. The third assault (many after-action reports of the period narrate about three attempts before victory is gained) was nearly successful: the Caroleans broke through the palisade and threw grenades onto the defenders so that their gunpowder store exploded. The defenders, finding themselves in a desperate situation, beat off the enemy again with heavy loss. Maidel saw he was not gaining anything in this place, moved on and left the fort in peace.[64]

Of course, the most famous and successful (this time) was the Russians' use of a field fortification at the Battle of Poltava and operations prior to it. Extensive

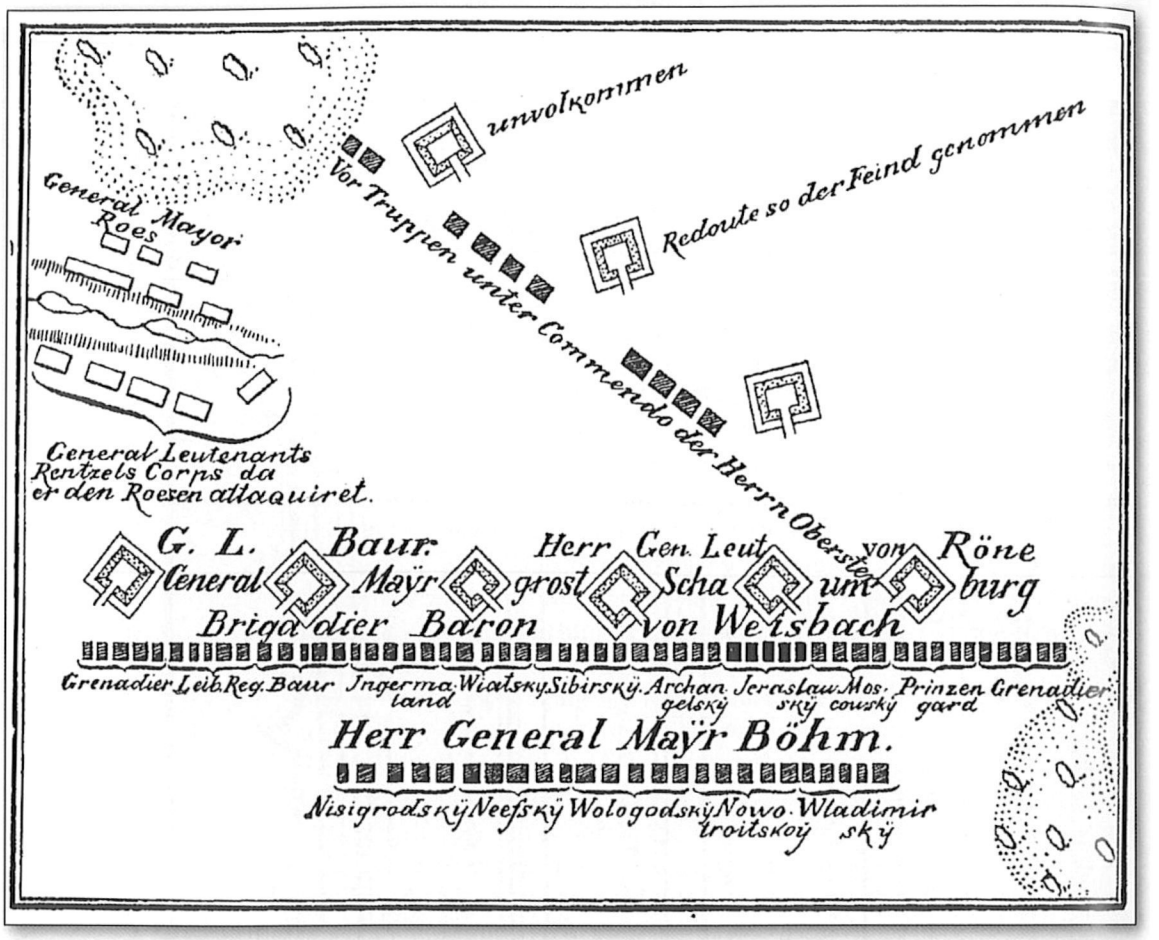
62 *Trudy IRVIO*, T. 1, pp. 137–139.

63 Adlerfeld, Vol. 1, p. 80.

64 'Podlinnoe donoshenie' in *Vedomosti*, (Moscow, 14 September 1705), p. 3. See also: *Pisma i bumagi*, T. 3, p. 381; *Gistoriia Sveiskoi voiny*, Vol. 1, p. 118.



108. Plan of the Russian camp near Poltava with positions of all infantry regiments, 1709. (Manuscript department, Library of the Russian Academy of Sciences)



109. Another version of the system of Poltava redoubts – Y-shape – with dragoon regiments posted around it.

trench building continued throughout May and June 1709 when the Petrine army on the east bank of the River Vorskla tried to relieve Fortress Poltava, which was besieged by Swedes on the west bank. Pretty much according to Vauban's treatise, they approached step by step, built retrenchments along the river and attempted to build bridges to cross it. The Swedes on their side built their trenches, so both armies were involved in an engineering contest that in the end was won by the Caroleans. Despite numerous bloody skirmishes and even one successful breakthrough of a unit across the river and into the town, it became obvious that it was impossible to cross the river in the vicinity of Poltava. Having marched several kilometres upstream, the Russians crossed the river freely on 1 July and immediately built a fortified camp as a *tet-de-pont*. Then they moved towards Poltava along the west bank and built another fortified camp on the 6th. It was this camp that accommodated 28 regiments of foot and all the ordnance on the day of the decisive battle. The shape of the camp remains subject to dispute; the most widespread and official version shows it rectangular, some show it trapezoid and one map something totally irregular. Whatever the case, the faces of the camp were a chain of redans, corners reinforced with bastions; according to Hallart, they first erected redans and put *chevaux-de-frise* in between, because the time was limited. This position had played its role; after Swedish regiments broke through the

system of redoubts they approached the camp as close as 15–20 paces and exposed themselves to a heavy cannonade from the parapets. The detailed roster of artillery expenditure shows that the field artillery of 32 pieces fired 275 roundshot, 148 rounds of grapeshot and canister and 62 bombs.[65] This forced the Caroleans to withdraw and regroup on the further side of the field.

The system of redoubts built in the way of the Swedish attack at Poltava is considered to illustrate real know-how on Peter's part. The redoubt as such was a popular type of fieldwork: a small square fort for infantry with a moat and parapet, it had an enclosed perimeter which made it easy to defend, but once captured by the enemy it was hard to regain. So treatises recommended that redoubts were put in remote places and not, for example, made part of a field camp; redoubts were used to reinforce lines of countervallation or siege trenches in the age before parallel trenches became the norm.[66] Even chains of redoubts were not unheard of: in France they covered borders, and Montecuccolli advised that they were used to cover supply routes in the rear. The novelty of the Poltava redoubts was their placement in front of the army. Maurice de Saxe in his *Reveries* highly praised Tsar Peter for this invention, although he remained critical of Petrine troops. The effect the Poltava redoubts had – breaking the advancing Swedish army into two parts, one of which under General Roos lost its way and eventually surrendered – made scholars believe that it was the initial brilliant plan to use the system as a wave breaker. However it seems more probable that one line of redoubts was built on 6 July to support the numerous Russian cavalry that occupied the ground in front of the camp. Another line was built on the night of battle as a means of early notification of the enemy attack. The layout of the redoubts, just like that of the camp, is discussed by scholars today. The classical version shows 10 forts placed in a T-shape; some period maps show nine to 12 forts in something like a V- or Y-shape. Whatever the layout, the redoubts were manned by Brigadier Aigustov with six foot regiments, totalling 4,730 men. The two furthest redoubts were not complete by the start of the action, so they were carried by the Swedes relatively soon; in comparison to them the third redoubt that the Swedes attacked seemed large, it was just finished, its garrison offered due resistance, and withstood. The Caroleans did not attack other redoubts, they marched through them in order to attack the main Russian army in the camp. But the redoubts definitely surprised and disordered the enemy columns, and as said made General Roos lose his way.

The fortified camp of Poltava was not the only example. In 1705–1706 the Russians built large fieldworks around the town of Grodno in Grand Duchy of Lithuania, and stayed within them for several months. Charles XII once approached it and after several hours of exchanging fire retired, the Grodno camp being too strong to assault; it proved better to blockade it and make the defenders starve inside.

65 D.P. Strukov, *Russkaia artilleriia pod Poltavoiu* [Russian artillery at Poltava] (SPb, 1911), pp. 3, 4.

66 A.M. Mallet, *Les Travaux de Mars ou L'Art de La Guerre*, T. 2, (Paris, 1696), p. 342; *A military dictionary. Explaining all difficult terms in martial discipline, fortification, and gunnery* (London, 1704), p. [RE]; *The Art of War, In four parts. Written in French by Four Able Officers of Long Service and Experience, and Translated into English by an English Officer* (London, 1707), p. 221.

110. The Russian camp fortified with ***chevaux-de-frise*** and surrounded by Turks. (Rastrelli, Nartov; author's photo).

The 1711 campaign showed probably the most evident case when even an improvised fortified camp in the field made a huge difference. When surrounded by numerous men of the Ottoman army, Peter found himself pressed back to the river Pruth, his troops hastily constructed defences – an irregular perimeter traced with *chevaux-de-frise*, half buried in dug out earth. This position was heavily attacked by Turks and Tartars who despite several bloody setbacks kept attacking only one side of the camp but failed to break in. This allowed Peter to start negotiations and to achieve a ceasefire on tolerable conditions for a trapped Petrine army. When the Russians marched away, musketeers carried *chevaux-de-frise* on the flanks of the marching column to prevent Tartar horsemen from surprise attacks.

Chevaux-de-frise (plural, French; or *rogatki* in Russian) were mobile obstacles used to defend infantry against an enemy charge in the field or to block passages on bridges, streets, breaches, or gorges, or to reinforce the parapets of field fortifications. The Russian infantry did not have *chevaux-de-frise* universally throughout the war years. At Narva in 1700 they were placed on the parapet of circumvallation and were all lost once the Swedes carried the position. After this loss the troops seem to have recovered their *chevaux-de-frise* in 1705. At Holowczyn, Repnin's Division left their half-pikes in their abandoned retrenchment (and the beams were absent). By Poltava campaign regiments were probably well equipped with them, but only used them to fortify the camp, without bringing the onto the open field this time. In various years every foot company had from three to eight *chevaux-de-frise* beams; each 2.5 metre-long beam was set with 20–24 half-pikes and had an iron hook and loop on its ends, so that beams could be attached to each other to form a continuous chain. Special carts were assigned to transport them.

Saxon allies used *chevaux-de-frise* in their lost Battles of Kliszow in 1702 and Fraustadt in 1706, where they placed them in front of the infantry lines. The Swedes also seem to have used them albeit not in field battles but in securing fixed positions, for example at Rashevka.

Besides conventional *chevaux-de-frise* the Russian army in 1711 (and even earlier) was equipped with something else. 'Secret knives' were carried in the train and distributed among soldiers at the end of the Pruth siege; these were to be thrown in front of the attacking enemy, but since hostilities ceased and the army retreated, all the secret equipment was thrown into the river, so we do not know for sure what it was. Perhaps it was a modification of a Schosstrap or Caultrop.[67] Evidently there were 'inventors' who successfully sold old ideas under new branding to the Tsar.

Another way to construct a fortification in the open was *Wagenburg* – wagon carts placed close to each other and forming a defensive perimeter. The military lexicon of the period read that by then this method of defence was largely abandoned in Europe in favor of fieldworks, but the Poles, Hungarians, Turks, and Tartars still used it.[68] In case of emergency the Swedes also used it, for example at the Battle of Lesnaya where General Lewenhaupt defended a large supply train. Marching in *wagenburg* was the usual way of campaigning against the Crimean Tartars in the southern steppes for Russians in the 17th century. In the Pruth siege, in the middle of the camp Russians started building a *wagenburg* out of train carts with earth thrown on them; this was to be a citadel for irregulars and camp followers, should the army leave the camp to attack the enemy (there was a plan to break through if the Turks rejected negotiations).

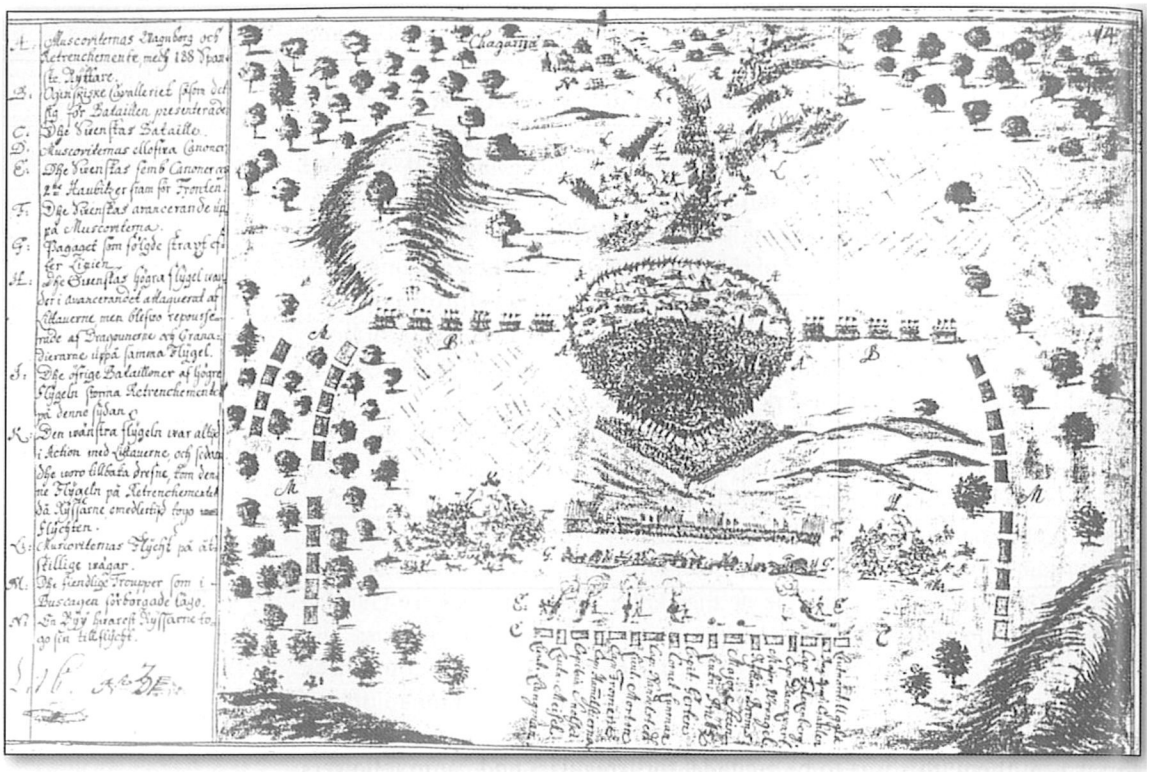
We know one instance of real combat use of *wagenburg*. On March 29 1703, at the battle of Salaty in Lithuania, the small Swedish force of Colonel Lewenhaupt (the same who was General in 1708 at Lesnaya) attacked the Russian-Lithuanian allies. The Russian foot – two *streltsy* regiments of Colonels Nechaev and Protopopov – barricaded themselves on a hill, with wagons guarded by *chevaux-de-frise* outside and cannons inside. An account of what happened next by Adlerfeld reads:

> They made a terrible fire, but without effect, most of their shots flying over the Swedes, who were now ascending a hill, at the top of which the enemy was barricaded. Our fire, on the contrary, did great execution, very few shots miscarrying; and our foot, having at last broke through and forced their intrenchments, began to make a dreadful execution, in spite of all the vigorous resistance of the Russians, who, seeing themselves pressed and lost, fought with the but-ends of their muskets, halberds, and pikes, and at last threw themselves under wagons, where they made a most desperate defence. The long pikes of our foot were now so extremely useful, that the Russians, seeing themselves unable to make any longer resistance, took to their heels in the rear of their intrenchments, and fled in great confusion.[69]

67 K.V. Tatarnikov, *Russkaia polevaia armiia 1700–1730* [Russian field army, 1700–1730] (Moscow, 2008), pp. 112–113.

68 J.R. Fäsch, *Kriegs-Ingenieur- und Artillerie-Lexikon* (Nürnberg, 1726), p. 266.

69 Adlerfeld, Vol. 1, pp. 208–210.



111. The Russian and Lithuanian wagenburg carried by the Swedes at Salaty in 1703. (Unknown author)

Storming enemy field fortifications was another 'use case' for the Russian army, although primary sources are often poor in details. In the first Vyborg campaign in 1706, when approaching the city on 22 October, the Russians faced two strong forts. As Whitworth put it, the Swedes had built two large redoubts on the road; the first, garrisoned with 400 men and defended by a double row of palisadoes with a good ditch, was abandoned on their approach; but the second, being advantageously situated in marshy ground and having two pieces of cannon, was maintained by 300 men for about an hour. However, breaking down their bridges, they then also retired into the night through the woods, although the cannon and some of the rearguard were taken just before the gates of the place.[70] Peter in his correspondence mentioned that the attack was preceded with a cannonade of two cannons and then the forts were taken with drawn swords and only five men were killed in this action.[71]

In October 1708 army of Finland of Major-General Lybecker entered Ingria from Vyborg, marched around St. Petersburg and eventually came to a place called Kolkanpaa or Soikina where the corps, having achieved nothing in this campaign, started embarking onto Swedish ships (this evacuation is also known for the slaughter of 6,000 horses that the Swedes could not embark and did not want to leave to the enemy). Fedor Apraksin was hesitant to oppose Lybecker in his full strength, but when most of the enemy troops embarked, the Russians attacked the part of the corps that remained on shore.

70 Sbornik IRIO, T. 39, p. 337.
71 *Pisma i bumagi*, T. 4, p. 401.

The place of the Swedish embarkation was fortified with a retrenchment and Apraksin attacked it from two sides. The grenadier battalion of Major Grekov moved around the flank over the shallows and charged from the sea side. After their resistance broke, some Swedes ran into the water and some to the forest where all were put to the sword or imprisoned; some retreated into an inner fort that was stormed also. The execution was terrible and the attackers suffered considerably. Grenadier Sergeant Gryaznoy recorded that his captain was killed, his lieutenant and 2nd lieutenant wounded and he, the sergeant, stepped in to lead his company and eventually was also wounded by a grenade. The attack was carried under cannonade from the Swedish fleet, which did not do any harm. Swedish battalions staffed with Saxon ex-prisoners suffered around 90 percent casualties in this combat.

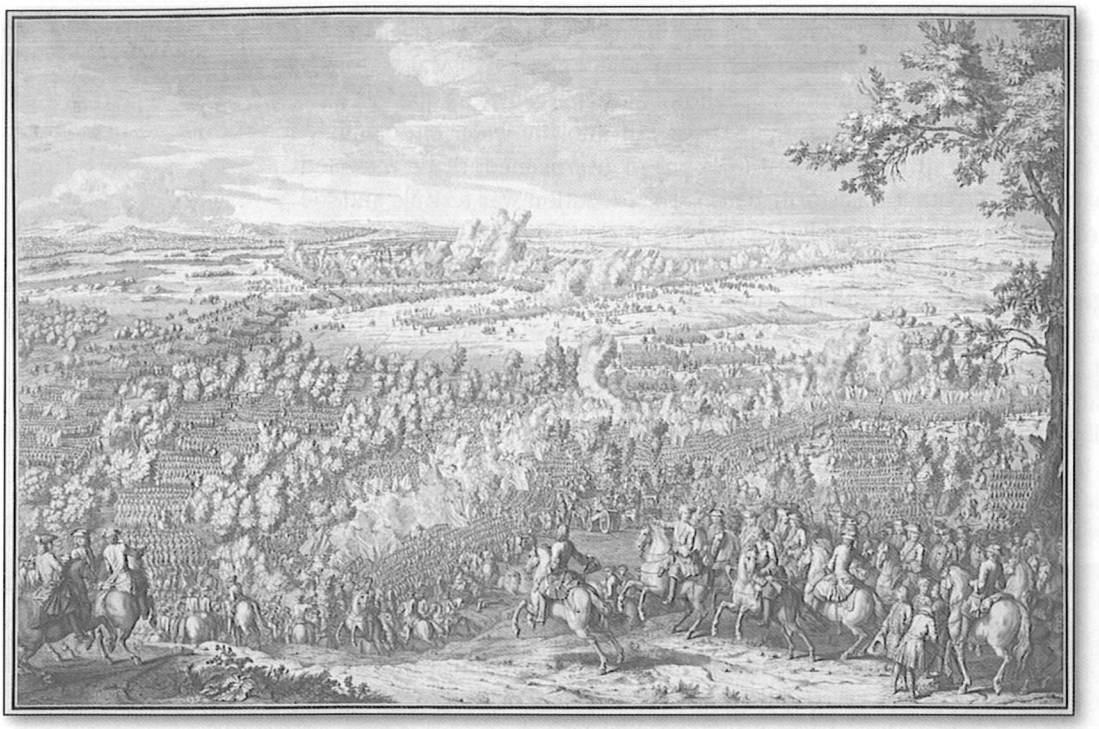
Fieldworks were a promising obstacle when they blocked a narrow passage. On 11 February 1713 the Tsar's army approached the city of Fredrikstad in Holstein. All the area was flooded and only narrow dams led to the place. The Swedes erected three retrenchments across the dam but abandoned two of them and retired to the third one, which had cannons. Guard grenadiers under Major Glebov marched at the head of the column having only six to eight men abreast. Under enemy fire they ran up to the parapet, stood in between the embrasures and hurled grenades inside, which made the Swedes abandon their guns and flee. Soon they evacuated Fredrikstad and shut in Tonning.

Small War

What was known then as small war was operations of parties of regular and irregular troops. The aim of these partisans – detachments independent from their main army but controlled by it – was to operate on the rear or flanks of the enemy army or to operate in enemy territory. The parties were to disturb their communications and supplies, destroy magazines, deprive the enemy of shelter and fodder in the country, capture prisoners, and harass enemy soldiers by keeping them alert. Foraging, reconnaissance, or delivering dispatches were of course also attributed to this kind of warfare.

Cossacks and other irregulars were naturally fit for these kinds of actions. One of the important features of irregular troops was that every man ideally had two horses, which meant he was able to ride long distances without exhausting the mounts: he remounted on his second horse, and gave rest to the first one. That is why Field Marshal Sheremetev emphasised that dragoons were not a reasonable alternative to irregulars in faraway raids or chasing enemy couriers: 'I cannot send dragoons for they have a single horse each and it is not their business to ride without formation', he wrote in 1704.[72] Later that year when the Tsar's army started to advance towards Lithuania, Sheremetev wrote to Peter that the enemy had Vallachs and Poles who were

72 N.P. Volynskii, *Postepennoe razvitie russkoi reguliarnoi konnitsy*, T. 3, p. 371; N.G. Ustrialov, T. 4, part 2, pp. 310–312.



112. The battle of Lesnaya, 1708. Print by Nicolas IV de Larmessin (1684–1753) after the painting by Pierre Denis Martin the Younger (1663–1742)

accustomed to operating in small parties, so the Russians needed their light troops, namely the Tartars, Kalmyks, and Don Cossacks, to oppose them.[73]

In 1708–1709 small war was carried out by comparatively large bodies of troops. As a rule they were combined dragoons and irregulars, led by smart commanders like cavalry generals Inflant, Bauer, and Ronne, or Guard officers Ushakov and Bartenev.

Although cavalry was the most instrumental, foot was also employed in small war operations. For example on the Karelian isthmus, i.e. the area between Swedish Vyborg and Kexholm and Russian St. Petersburg and Schlisselburg, infantry parties were sent from the Russian side to gather intelligence in Swedish realms, devastate settlements and attack enemy parties. In winter same raids were carried out on skis: officer Ivan Naidinsky from St. Petersburg garrison recalled doing so between 1705 and 1708.[74] Swedish parties also reached Russian places to captures prisoners, kill workmen on construction sites, etc.

The peoples' war (known as *guerilla* or *partizan* in later periods) was not typical to the Great Northern War, albeit it was not unheard of. There were gangs of peasants probably in all lands who attacked foragers or travelling individuals. Occasionally some armed countryfolk took part in more considerable actions against the enemy, for example priest Ivan Okulov with his thousand men who in 1702 in Karelia attacked Swedes across the border,

73 NIA SPbII RAN, F. 270, Op. 1, D. 41, p. 73.

74 B.V. Adamovich, *Sbornik voenno-istoricheskikh materialov Leib-Gvardii Keksgolmskogo polka* [Collection of military-historical materials of Life Guard Keksgolmsky regiment]. T. 1. (SPb, 1910), p. 65.

or Ukrainians who occasionally took arms against Swedish invaders in 1708–1709. Still, they did not do as much harm to the enemy as regular parties.

According to the articles of war, prisoners taken in a battle were the Sovereign's captives, but those taken in the country by parties became private prisoners. Englishman Whitworth tried to describe – to the extent he could understand it – the origins of the custom and its effect on the Swedish lands:

As the ground lies in most parts untilled, and the improvement of every gentleman's revenue is the number of his peasants, or subjects; it has been the old maxim of the Muscovite officers in all their successful wars to carry off as many of the people as they could, and plant them on their own estates: several towns on the Wolga, are the Fruits of their former expeditions in Poland and Lithuania; and they have at present drained above one third of the inhabitants from Ingria and Livonia, and settled whole villages of them in the southern parts towards Voronezh, who, finding their new slavery easier than their old, the earth more fruitful, and the climate more gentle, would, I believe, never return back, though left at liberty; an irreparable loss to the King of Sweden, if ever those provinces should return to their former master.[75]

It was usual for both sides to strip prisoners of their clothes, leaving them nearly or literally naked. In September 1708 the Tsar demanded from General Bauer that his men did not strip Swedish deserters, because it would deter other Swedes from deserting: 'Declare to all yours, officers, dragoons, and especially Cossacks who are so used to this barbarity, that they do not dare to take anything from deserters.'[76]

The attitude of ordinary Russian warriors to the war, their perception of approvable behaviour in enemy lands, treatment of settlements and inhabitants must have been hugely affected by the experience of generations and by their confessional background. A little-known anonymous script from 1700, written most likely by a noble cavalryman who took part in the first Narva campaign, describes what probably was the common belief and understanding in early Petrine society. After the army arrived at Narva, the commanders prohibited looting local settlements under pain of death, and supplies were to be bought from locals. This approach seemed strange and contradicted the Old Testament examples where Moses, Aaron and Jesus Navin fell upon pagan lands, killing and enslaving the population. The anonymous writer concluded that the defeat at Narva was Gods punishment for not being warlike enough on the enemy land. Besides, he was discontent with the official approval to soldiers to not keep the fast. Dissatisfaction with everything new made him despise the introduction of bayonets and the banishment of *berdysh* axes. He also described in detail why the Swedes were 'Lutheran heretics' and stated that after Swedes killed Russian warriors, 'ours also started burning their villages and churches.'[77]

75 Charles Whitworth, *An Account of Russia as it was in 1710* (1758), pp. 182–183.

76 *Pisma i bumagi*, T. 8, 1, pp. 139, 148.

77 'Letopisets 1700 goda' [Chronicler from 1700] in *Letopis zaniatii Arkheograficheskoi Kommissii 1865–1866* [Chronicle of activities of Archeographical Commission]. Vyp. 4. Materialy. (SPb, 1868), pp. 139–141.

113. The Battle of Kalisz, 1706. (Rastrelli, Nartov; author's photo)

Over time this attitude mainly survived among irregulars, but for the meantime we can be sure that more or less all Petrine soldiers and dragoons had a similar understanding of how war should be waged. This was the mode the Russian military got used to after centuries of wars east, south and west from Moscow. Foreign officers in Russian service displayed a no less brutal attitude to civilians (both enemy and friendly), although it hardly had anything to do with their oriental background. Frenchman Alexander Malin, colonel in a newly raised dragoon regiment in Sheremetev's troops, early in 1703 was accused by the Field Marshal of imposing extraordinary requisitions on the villagers which led to the officer's dismissal.[78] Brigadier Fastman and Colonel Veterani were arrested for either initiating or encouraging the plunder of Romny in the Ukraine in December 1708, despite the inhabitants welcoming Russian troops. This incident also abused several of the Tsar's *universalis* – manifestos that guaranteed safety to the Ukrainians and strictly prohibited troops doing any harm to them; naturally, the Tsar needed to keep this land loyal.[79]

78 N.P. Volynskii, *Postepennoe razvitie russkoi reguliarnoi konnitsy*, T. 1, p. 149.
79 *Pisma i bumagi*, T. 8, 2, pp. 779–780, 1031–1034.

Despite personal attitudes or customary methods, there were strategic goals that were to be achieved. Enemy provinces with their settlements, crops, corn, and fodder were essential to their army. In order to deprive the Swedish regiments of these supplies, it was believed necessary to devastate these lands. On 16 December 1700 Peter ordered Sheremetev: 'Take the Novgorod horse and the Cossacks and go far to do more harm to the enemy, meanwhile keep intact places that are close us.'[80] This meant that Livonia was doomed to the burning of villages, destroying or carrying away supplies and imprisoning peasants; borderline areas were spared as a supply base for the Russians. At the same time, the Swedes invaded onto Gdov, Pechory, and Ladoga with the same aim to burn settlements and gather supplies. The troops were followed by Livonian and Ingrian peasants who joined the army to take part in plunder.[81] Still, the Russians succeeded more in this devastation strategy and throughout 1701–1703 the provinces of Livonia and Estonia, except for big cities, became practically uninhabited; this made any movements of large Swedish forces in the region almost impossible.

Early in the war Livonia was considered enemy territory that was upon conquest to be handed over to Augustus of Poland, Russia's ally. That is why, besides other reasons, Peter found its burning affordable. On the contrary, Ingria was a land to be reconquered and added back to the Russian state, so the Tsar was unhappy with Major-General Peter Apraksin who applied the same scorched earth policy there in 1702. The general responded that the villages he burnt were small and useless to the Tsar's troops, but were unsafe to remain intact in the rear as a potential bases for enemy soldiers and a hostile population.[82] This probably helped to pave the way for Russian troops to take Ingria, but made the locals, including native Russians, more hostile. This differing understanding of the methods of war between the Tsar and his generals occurred more than once. The conquest of Finland started in 1712: Peter needed this region to weaken the enemy economy and as a negotiating chip at the peace talks he hoped for. So in October he wrote to General Admiral Fedor Apraksin with these reasons and instructed him not to devastate the land. By that time, however, operations in the area had been ongoing since the summer and the cavalry had done it in usual way, i.e. devastating an area of 40 kilometres around the road including taking away people and cattle.[83]

The infamous scorched earth policy in 1707–1708 was a brutal and efficient way to exhaust the advancing enemy. Unlike when in other lands, villagers and landlords in Russia were warned in advance that if they did not bring their corn for sale to a walled city like Smolensk or hide it in the earth, it all would be burned before the enemy came.[84] Abandoned places were also to be destroyed so that the enemy could not use their resources. The *Chronicle of the*

80 *Ibid.*, T. 1, p. 410.

81 Adlerfeld, Vol. 1, pp. 65, 70; B. Nilsson, *Abraham Cronhjort and the defence of Ingria 1700–1703*, pp. 332–333, 335.

82 *Pisma i bumagi*, T. 2, pp. 78, 389.

83 A.G. Shkvarov, *Severnaia voina 1700–1721 gg. Donskoe kazachestvo na pribaltiiskom teatre*, (Helsinki, 2009), pp. 47, 49.

84 *Pisma i bumagi*, T. 8, 1, pp. 24, 51

114. The Battle of Poltava, 1709. (Rastrelli, Nartov; author's photo)

Belorussian town of Mogilyov provides a first hand account of what happened to such a place.[85] When the Russians retreated after Holowczyn in July 1708, they passed through it; a detachment of General-Adjutant Schilling was left to burn the town but the burgers paid him not to do it and the same night some Swedish troops, exhausted after a long march over the devastated landscape and after the tiresome victory, entered the still intact place. Throughout the war years Mogilyov saw many troops passing by; Lithuanians and Russians imposed numerous contributions, but the Swedish requisitions were recorded in the Chronicle as something extraordinary. King Charles ordered that each town quarter provided a certain amount of corn, and that every his regiment received a certain amount of money from the townsfolk; wealthy burgers were tortured to give out more money, and churches and monasteries were deprived of their silver. This short stay of the Swedish army in the town improved the wellbeing of the troops considerably, and it explains why Peter was not willing to allow such a wealthy place into enemy hands. So when the Swedes left the town and marched further eastwards, the Tsar's troops returned and put the

85 A. Trubnitskii, M. Trubnitskii, 'Khronika belorusskogo goroda Mogileva' [Chronicle of town of Mogilev] in *Chteniia v Imperatorskom obshchestve istorii i drevnostei rossiiskikh* (Moscow, 1887), Kn. 3, Otd. I, Ch. 3, pp. 52–69.

place to ashes with 'some most brave' locals accomplishing the devastation of the town by plundering what escaped the fire.

Devastation of towns occurred several times during the war. In January 1713 Swedish General Count Stenbock put to ashes Danish Altona and declared that it was in retaliation to the Danish bombardment of Staden.[86] Tsar Peter in return resolved to burn places in Swedish Pomerania, where weak Russian garrisons were at risk of Swedish attack: fortifications were to be ruined, textiles and money were to be requisitioned, towns set on fire from all corners but churches were to remain intact and the people allowed to go where they wanted. Gartz and Wolgast were burnt this way in March but Anklam and Demmin were spared, for by then Stenbock was shut in Tonningen and did not pose a threat to Russian garrisons in Pomerania. There was a dramatic story of how Tsarist Major-General Staff was resolute to follow the initial order and burn Anklam even when it was already obvious that it was not necessary. A duel between Staff and Danish naval officer Christian Tomsen Karl, who was stabbed by Staff, allowed the postponement of execution on the town, until the order was finally rescinded.[87]

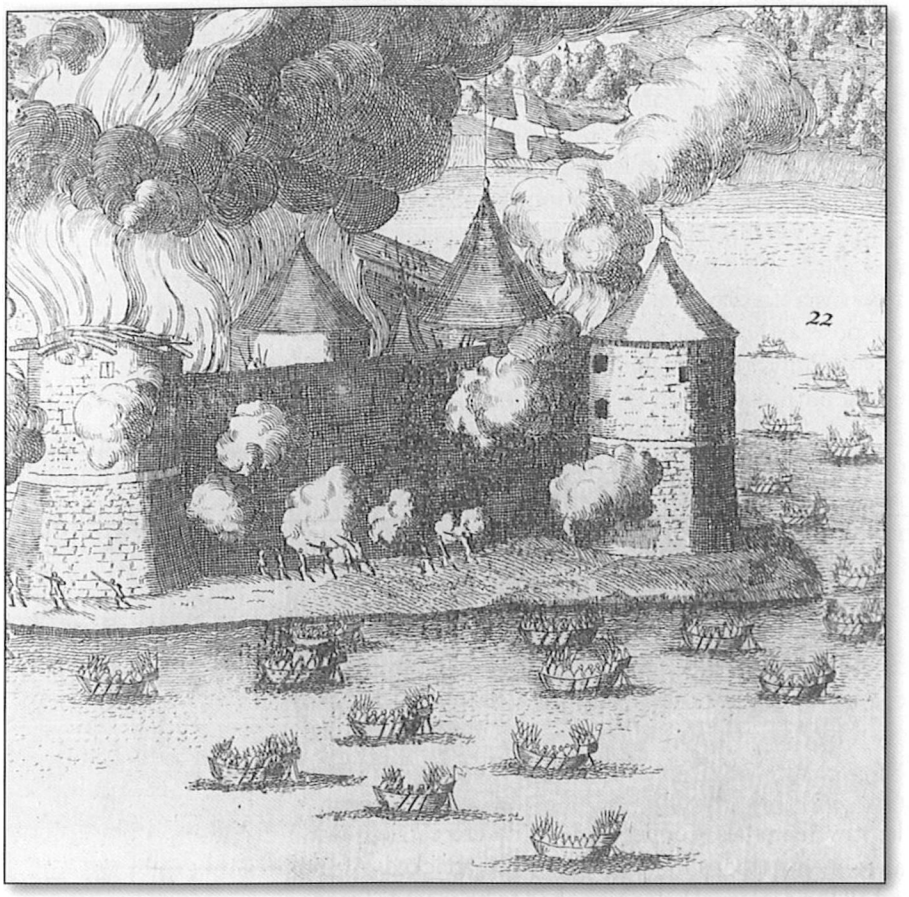
Final accords of the war saw more burning, but now it had not logistical nor military but political motifs. By 1718 Sweden had lost almost everything and it was clear that the war now had to be stopped. The Åland Congress between the Russians and the Swedes in 1718–1719 stalled, as the Swedish side refused to sign peace in hope of intervention by Britain. Tsar Peter resorted to ravaging the Swedish coast as the means to stimulate the Swedish government to finally sign the peace treaty. The goal was to inflict as much damage as was possible to the Swedish economy. Instructions issued by the Tsar clearly stated what had to be destroyed: ironworks, factories, ports, stores, farmsteads and mansions, crops, cattle; raw materials, copper and iron were carried away or thrown into the water; enemy troops in sight were to be attacked. At the same time, churches and all their internal belongings had to be spared. Troops also were ordered to not to touch or imprison local people who did not raise weapons. An instruction read: 'Not only do not capture people but do not rob them nor irritate them in any way; tell them we fight because their Senate is not inclined to peace'. Thus casualties among the Swedish population during those notorious Russian raids were nearly non-existent, especially when compared to what happened in Livonia, Estonia, or Finland earlier in the war.

Siege Warfare

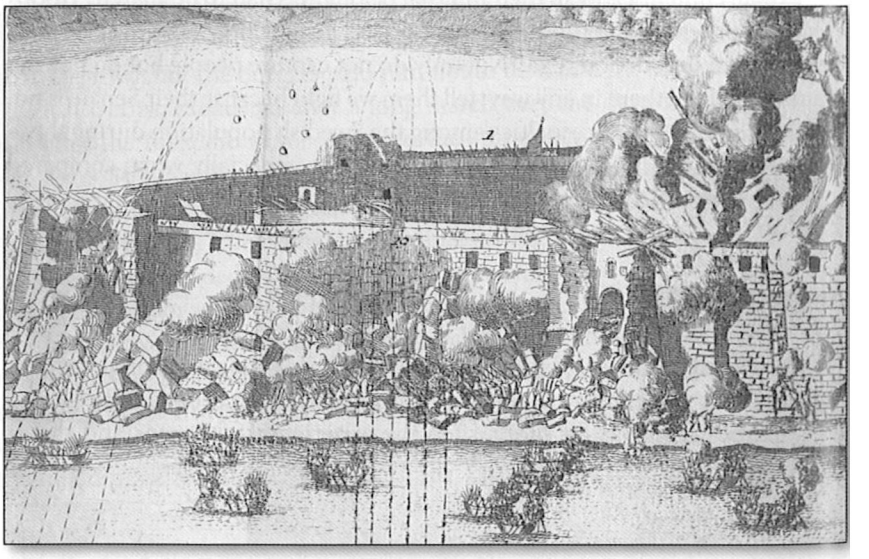
The attack and defence of places constituted a considerable if not predominant part of military operations in the late 17th and early 18th centuries. Besieging or being besieged was far more often the experience for troops and this is

86 British Officer in the Service of the Czar, pp. 371–381.

87 C. Heller, *Chronik der Stadt Wolgast* (Greifswald, 1829), pp. 225–233; *Kurtze Relation Von Der erbärmlichen Einäscherung der Pommerischen Städte Gartz und Wolgast, Als dieselbe Respective am 16. und 27. Martii Anno 1713. von den Moscowitern kläglich in die Asche geleget worden* (1713); *Pisma i bumagi*, T. 13, 1, pp. 98, 125, 308–309.



115. The assault on Noteburg, 1702. Fragments. (Adriaan Schoonebeek (1657–1705))



especially true for the Russian army of Peter the Great in the course the Great Northern War.

The geography of sieges was as widespread as the war itself. Regions where Russians did besiege were Ingria (the fortresses of Noteburg, Nyen, Jama, Koporie), Karelia (Vyborg, Kexholm), Livonia (Narva, Dorpat, Riga, Dunamunde, Marienburg), Courland (Mitau, Bausk), Estonia (Reval, Pernau), Northern Germany (Toningen, Stettin, Stralsund) and Finland (Kajaneborg, Nyslott). In the Ukraine the Tsar's troops were both in defence (Veprik, Poltava, and smaller places) and on the offensive (Baturin, Sich, Perevolochna). In the 1711 Turkish campaign they defended Belaya Tserkov and stormed Brailov.

The places under attack varied in their strength. Some were big cities encircled with ramparts (e.g. Narva, Dorpat, Riga, and Vyborg), others were smaller castles and citadels (such as Noteburg, Ivangorod, Mitau, Bausk, etc.) or even the earthen and wooden fortifications of towns and villages in Ukraine (Poltava and Veprik, Mglin, Nedryhailov, Ternov, Oleshna, Rashevka, Oposhna, Senzhary). Some had up-to-date bastions and ravelins, others had outdated bastions of earlier design; some were mere medieval fortifications of the pre-artillery era while others were designed only against nomadic raids in the steppe.

The sieges where Tsar Peter was present are better described in sources, so they often overshadow sieges on secondary fronts. For example,the storming and taking of Marienburg, a castle on an island in Livonia, by troops of Boris Sheremetev in August 1702, is less known than the similar storming and taking of Noteburg, an island keep in Ingria in October 1702 where Peter took part in operations. In 1711, the inglorious campaign on the river Pruth, where the Tsar's army was surrounded with outnumbering Turks and Tartars in the field, is best known, unlike daring and successful defence of the small Russian garrison in the fortress of Belaya Tserkov in Ukraine; or the carrying by storm of the Turkish fortress Brailov by a corps of dragoons of General Ronne.

The conflict being a coalition war, there were joint siege operations of the Northern Allies, like six months long defence of Dunamunde in 1701 by Saxons and Russians, their siege of Pozen in 1704 or sieges of Stettin, Stralsund and Toningen together with Danes and Saxons. Of course there was a number of sieges that went without Russians – defence of Thorn by the Saxons in 1703 (may be the biggest victorious siege for the Swedes in the whole war), failed siege of Selburg 1704 by Lithuanians, defence of Wismar by the Swedes in 1711 and 1716 or Frederikshal by Dane-Norwegians in 1716 and 1718. Most sieges were carried out by regular troops, however in certain cases only irregular troops were involved in defence (e.g. Ukrainian Cossacks defended Nesvizh and Lyakhovichi in 1706; Polish-Ukrainian townsmen militia guarded Lvov against Charles XII in 1704). Swedish troops were the major foe of course, however the Russian army also faced Pro-Swedish Lithuanians (at Bausk), Poles, Tartars, and Turks, as well as rebels within the Tsar's realms: Astrakhan in 1706, Baturin in 1708, Perevolochna and Sich in 1709, and Novosergievsky in 1711.

The siege, or 'formal attack', was a succession of steps very well described by Marshall Vauban: opening trenches, building parallels and batteries, capturing outworks, crowning of glacis, making breaches in ramparts with

cannons or mines, crossing the moat and storming the breach. However this representation of a siege is largely an idealisation for all the aforementioned steps were rarely executed in practice in the course of one single siege. In any way, the closest to full scale 'formal attacks' for the Russian army were the taking of Dorpat and Narva in 1704 and Vyborg on 1710. Besides formal attacks there were other, 'non-siege' tactics employed: blockade, bombardment, storm, and stratagem.

The blockade, i.e. cutting off of communications to a place, allowed the saving of resources and forced the garrison to surrender from starvation. Armies would stick to this tactic when a formal siege would cause heavy losses either due to the cold season or to over-strong fortifications (Riga, October 1709 to July 1710, was the longest siege for the Russians). In some cases the besieger could have allowed lengthy sitting around the town when there was no hurry, and the besieged did not expect any relief (Kexholm, 1710) or when forces allocated for the siege were not enough for any resolute actions (Pernau, Reval). The plague of 1710 in Northern Europe affected the course of sieges too: once the garrisons and populations of Riga, Pernau, and Reval started literally dying out because of the epidemic, besiegers preferred to keep out of contact.

The most widespread tactic to suppress a fortress was bombardment, i.e. shelling a town with explosive bombs, incendiary hot shot or 'carcasses'. Vauban wrote against excessive bombardment for both humanitarian and economic reasons but for his contemporaries across Europe it was the easiest way to inflict damage and lower the morale of troops and inhabitants. Bombardment was the main reason why Nyen, Koporie, Jama, Mitau Castle and Stettin surrendered. When besieging Koporie, the Swedish-held Russian medieval castle, in 1703, Sheremetev complained that he did not have breaching guns and that intact ramparts on the top of the rock were too high to scale; but he had mortars. 'Thank God, Sire, your music is well played by mortars and bombs so that the Swedes now dance and give up their fortresses; if not for the bombs, I knew not what to do.'[88] In 1710 Peter instructed his generals who had blockaded Riga and Kexholm in nearly the same words: 'Suppress the place only with bombardment and do not formally attack, to avoid casualties to no purpose.' In the failed attempt on Vyborg in autumn 1706 shelling was the only way to inflict damage on the place before the besiegers retreated. In other cases bombardment was employed along with other tactics of formal siege.

It was very rare that places were attacked without artillery. For example, Elbing in February 1710 was taken by assault with no artillery involved. This was, in fact an instance of tactics where attackers carried an assault without preliminary siege works. Sometimes it was because of objective reasons such as the island location of a place or the cold season (thus, the Swedes stormed Veprik in January 1709 for there was no chance to conduct formal siegeworks). On other occasions there were subjective reasons that mattered,

88 B.P. Sheremetev, *Pisma k gosudariu imperatoru Petru Velikomu ot general-feldmarshala, tainogo sovetnika, Maltiiskogo, Sv. Andreia Pervozvannogo, Belogo orla i prusskogo ordena kavalera, grafa Borisa Petrovicha Sheremeteva* [Letters to Emperor Peter the Great from General Field Marshall Boris Petrovich Sheremetev]. T. 1, (Moscow, 1778), pp. 178–179.

for example when the besieger had no resources for a formal attack (Elbing 1710 was stormed when there was no siege artillery in place; in 1711 Brailov was attacked by a flying corps of cavalry that had no siege guns either) or the besieged expected succour and time was dear to the besieger, as it was in Baturin in 1708, and Perevolochna and Sich in 1709.

The 'stratagem' or military trick was a legitimate means of taking a fortress mentioned by authors of the period. A contemporary example would be the famous infiltration of Eugene of Savoy with his Imperialist troops into the French-held fortress of Cremona in Italy via a tunnel, in 1702, and capturing Marshall Villars. In the Great Northern War we can recall several cases of the kind. The Swedish squadron approached Novodvinskaya fortress in White Sea in 1701 under neutral flags; the assault on Baturin, when troops of Menshikov's took the place held by the rebellious Hetmanate Cossacks, is often described as if the Russians came via a tunnel or the gate was opened by one of the loyalists inside. These popular beliefs evidently emerged from the fact that the attackers appeared within the ramparts surprisingly fast – the effect that was achieved by charging from several directions, thus attracting attention of the garrison on one side and breaking through on another. Pure stratagem was devised in 1704 in the early stage of the siege of Narva. The Russians staged a mock battle between green and blue-clad Russian regiments as if the latter was a Swedish relief force coming to help Narva; this misled Swedish Governor Horn, and he sent out a sortie that was caught in an ambush and overrun. This action helped the Russians capture high-ranking prisoners and obtain more information about the place and its defence.

Besides cases when places were attacked and defended, there were numerous occasions when defenders abandoned their keeps without struggle even before attackers came close (such as the weak Swedish garrisons of medieval Livonian castles Rakvere, Viljandi, Poltsamaa, Paide, and Ruin did in 1703). In certain instances towns surrendered under threat of storm but without any attempts to fight (Polish Elbing and Pozen in 1703, and Ukrainian Zenkov in 1708 to the Swedes, Swedish Arensburg in 1710 to the Russians, or Fort Novosergievsky in March 1711 when Ukrainian inhabitants gave away the Russian garrison company to Tartars and Poles).

Although parallel trenches were known to Peter and his engineers, they were rarely constructed during sieges. At Vyborg the Tsar ordered that a parallel was built, but due to rocky ground this was abandoned. At Stettin in 1713 the first parallel was accomplished before the stronghold surrendered. Overall, maps of Great Northern War sieges differ from the ideal plans of Vauban's sieges. Approaches did not necessarily zigzag, as found in Vauban's treatise; they were strengthened with redoubts instead of parallels – a method that came from earlier in the 17th century. At the Dorpat siege soldiers had to walk waist deep in water, as the trenches were traced in marshy ground. In some cases the local ground prohibited digging in. At Narva it was all limestone, and at Vyborg granite, so both times the besiegers had to erect a trench parapet out of large gabions filled with soil and stones brought from afar. Rocky ground had another disadvantage in situations when operations were to be held in secret, for example in mounting guns onto batteries; the

iron-bound cannon wheels when driving over rock created so much noise that Vyborg garrison raised an alert and started firing upon the trenches.

In some cases it was impossible to carry approaches because the target fortress was located on an island, so the besieger limited his actions to blockade and bombardment (Kexholm 1710 and Nyslott 1714), or went on to storm across the water obstacle on boats or rafts (Marienburg and Noteburg 1702). In any case the trenches were still built in order to secure positions on the shores. Digging trenches did not necessarily start immediately after a town was invested (besieged); for example the Swedes invested Thorn in May 1703 but got to full scale formal attack only in September. The first Russian troops appeared in front of Narva in April 1704 while the siege started in June. The Swedes maneouvered around Poltava for months before they actually attacked the town.

Another important day in the course of a siege was when the batteries started firing. The bombardment, as already mentioned, was shelling with mortars, but as a rule both mortars and breaching cannons started playing at the same moment after all the heavy pieces were transported to the position and the batteries were built. This rule had its exceptions, such as in Vyborg where the first Russian batteries fired only a week after the place was invested in March 1710, but the final blow was done when another portion of artillery arrived and fired in June. Breaching the ramparts was not something that occurred in every siege. Russian breaching artillery failed to do the job in Noteburg in 1702 – the battering cannons became unusable before the breaches were finished (the vents enlarged after long firing), so the troops had to storm impassable ramparts with heavy casualties. In Dorpat the breaches were made, but for some reason were not scaled during the storm. At Narva, bastion Victoria was breached by guns in one week. 'The artillery is at present extremely well served; and general Ogilvy tells me, that he never saw any nation go better to work with their cannons and mortars, than the Russians did last year at Narva,' wrote Whitworth on 26 March 1705.[89]

At Vyborg a large breach that would fit a battalion was made within three days. In all aforementioned sieges the batteries were placed on the other side of the water obstacle – river, lake or sea bay. This contrasted with first Narva where batteries were placed in the field, so that all the guns were lost when the Swedes attacked and defeated the besiegers.

Besides artillery one could make a breach with exploding a mine; Russians started carrying a mine towards bastion Honor in Narva however they did not finish it after the face of the bastion collapsed during the bombardment and there was no need in mine any more. While besieging Poltava, Swedes dug through under the rampart and inserted a load of blackpowder to explode, however the defenders took the load via a countermine. This must have been the only instance of underground struggle which apparently occurred far more often in sieges in West Europe.

In Vyborg, besieged by troops of Admiral Apraksin, preparations were made to blow up a town wall with some unknown type of *machina infernalis*,

89 *Sbornik IRVIO*, T. 39 (SPb, 1884), p. 56.

116. The sieges of Vyborg and Kexholm, 1710. (Rastrelli, Nartov; author's photos)

but the place surrendered before that. The use of another interesting machine of the period – a petard – is mentioned only once. In February 1701 the Swedes invaded the Russian realm near Pskov and attacked the strongly fortified monastery of Pechory; a Swedish Major named Wallenstett was reportedly killed when attempting to attach the petard to the monastery gates. Russian ordnance included petards too, but never had a chance to employ them.

The taking of a counterscarp ('crowning of the glacis' or 'taking the covered way') was another key step when a besieger aimed at storming a place. The most outstanding example was the Russian attack on the palisade of Dorpat. The troops were given the goal of securing a position within the enemy palisade and a storm column of three companies was allocated, with supporting parties ready to come in upon signal. The action started on 23 July 1704 at around 1900 – the Russians cut through the stakes and gained ground but the Swedes brought up their reserves, then the attackers requested support and so forth, so that during the night both sides involved more and more troops. The area was very crowded and sources mention only an exchange of musket volleys, hand grenades and a cannonade from the ramparts of the place. By dawn the palisades were captured but it was obvious that the attackers would not be able to hold this position in front of the ramparts in daylight. Thus they kept up their advance and in the pursuit of the fleeing defenders the Russians captured a ravelin with cannons and charged the gate tower. This was an impromptu attack that was not prepared in advance: the troops did not have ladders to scale the ramparts nor could the Russian artillery support with fire in the night. Still, Peter and Sheremetev, having learned of the situation, ordered that the troops used the opportunity and kept up the assault. The attackers turned around the captured guns from the ravelin and used them, as well as hand grenades and axes, to break through the outer gates. The Swedes brought their cannons into the street and fired at the inner gates to prevent the Russians from breaking through. When it became obvious that the attack was about to succeed, the governor ordered a drum beaten for a parley. Officers on both sides had difficulties calming their men and stopping the fight. The troops remained at their positions, divided only by half broken inner gates while the capitulation was discussed and signed. Thus, what was planned as the taking of a counterscarp overnight spontaneously escalated to a full-scale storm of the place that ended with surrender.[90]

Proactive and daring governors sent out sorties in order to hinder or slow the advance of the besieger. The Russians encountered fierce sorties from Governor Horn's Swedish troops during the first siege of Narva in 1700. On 19 November 100 Swedes attacked the Russian approaches in front of Ivangorod Castle, killing 48 and wounding 63 men; *streltsy* Colonels Sukharev and Elchaninov were to face court-martial for their poor performance that night but were acquitted. Five days later, on the 24th, a sally of 150 Swedes came again and killed 41, wounded 64 *streltsy*, took prisoner Colonel Elchaninov

90 *Pisma i bumagi*, T. 3. pp. 167–168; Adlerfeld, Vol. 1. P. 335; ВПЖ Шереметева 1701–1705. СС. 157–166; Gizen, G. [Huyssen, H.] 'Zhurnal Gosudaria Petra I s 1695 po 1709' [Journal of Peter I 1695–1709], pp. 420–422; Laidre, M., *Severnaia voina i Estoniia. Tartu v godinu ispytanii 1700–1708* [Northern war and Estonia. Tartu in years of trial 1700–1708], (Tallinn, 2010), pp. 144–148.

and another senior officer, destroyed 120 paces of the trench line and returned to the fortress with few casualties.[91] Later in 1704 the Swedish governors of Dorpat and Narva began to send out large bodies of troops, however this led to considerable losses among them and did not help fend off the besiegers.

On those few occasions when the Russians were in defence, they made sorties too. The garrison of Poltava under Colonel Kelin maintained an aggressive defence with many sorties. Often these were rather large bodies of up to 1,500 men. A typical one from 6 June 1709 was described by Adlerfeld:

> The Governour of Pultowa sallied on our workmen in the trenches, and drove them home to the regiment of Dahl-Carlia, where a Lieutenant of this regiment was killed, with some soldiers and Zaporovians; but as soon as this regiment advanced to support the workmen, the enemy retreated in haste, with the loss of some men, killed and wounded. The Zaporovians, who had hitherto done good service in the trenches, returned thither no more with a good heart.[92]

One sortie was less successful since its commander Brigadier Golovin fell into Swedish hands, taken from his killed horse. This was the same person who the day before, on 26 May, managed to bring 1,200 men to succour besieged Poltava through the Swedish positions.

Once, a sortie helped to defeat the besiegers and even make them lift the siege. Belaya Tserkov in Ukraine was garrisoned by a small Russian and Cossack force of Brigadier Annenkov when a large force of Tartars and pro-Swedish Poles with Cossacks and some 40 Swedish officers attacked on 5 April 1711.[93] The governor sent out two parties of 200 men each and 100 in reserve, who with the assistance of local Cossacks attacked the enemy with hand grenades and musket volleys and then pursued them with bayonets. After the besiegers returned with cannons, Annenkov repeated the sortie with massive use of hand grenades; the enemy horse was repelled by infantry fire and eventually all the horde marched away from the town, leaving eight flags and 14 pennants to the victors. The Brigadier reported that he had lost only eight men killed and estimated the enemy's loss at over 1,000. This of course could not have happened if the besiegers were a more orderly force.

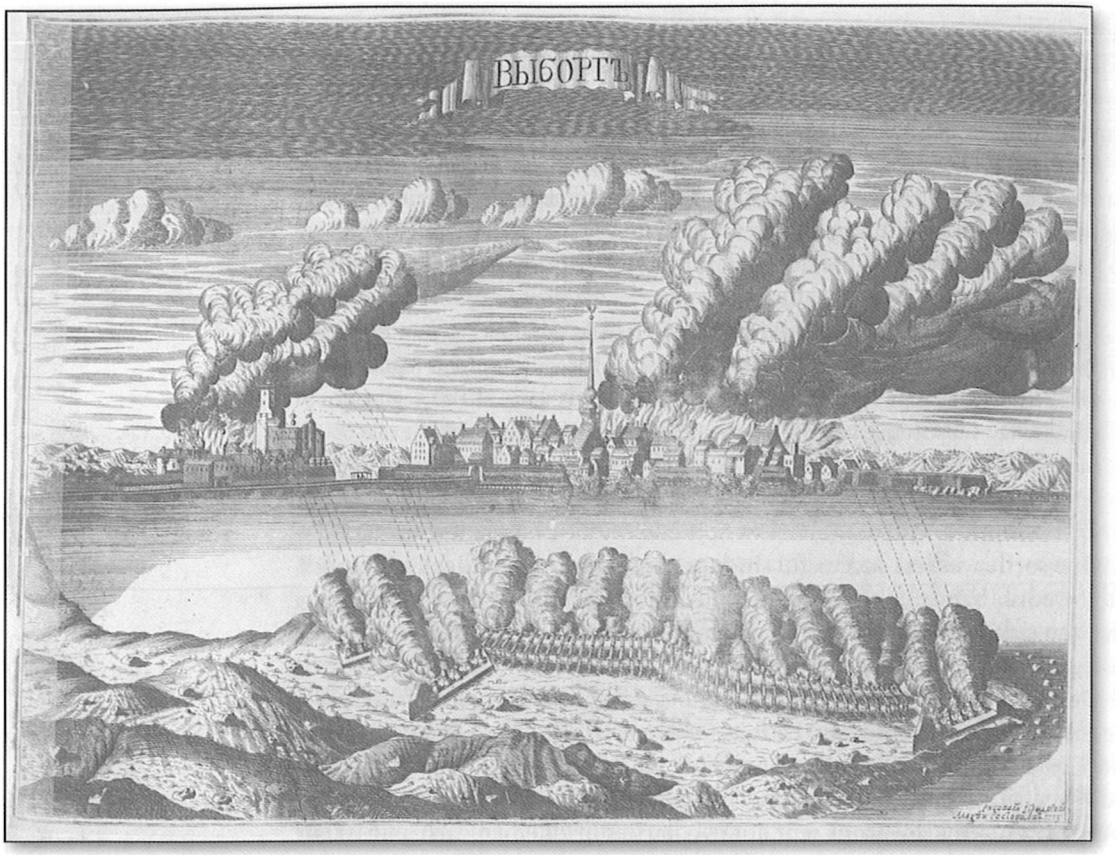
The storm was the culmination of the formal attack, and as such it happened relatively rarely. Narva, in 1704, seems to be the only example of a strong fortress taken by storm after a formal siege. Armies more often stormed without a preliminary lengthy siege, if stormed at all.

Assault columns were composed of either volunteers or assigned troops. At the storm of Noteburg many soldiers volunteered first, but when their

91 Hallart, *Das Tagebuch*, pp. 47, 50.

92 Adlerfeld, Vol. 3, p. 114.

93 *Materialy voenno-uchenogo arkhiva glavnogo shtaba* [Materials of Military Registration archive of General Staff]. T. 1. (SPb, 1871), pp. 675–678; M. Sudienko, *Materialy dlia otechestvennoi istorii*, T. 2, (Kiev, 1855), pp. 33–36; A.Z. Myshlaevskii, *Voina s Turtsieiu 1711 goda. Prutskaia operatsiia. Materialy, izvlechennye iz arkhivov* [War with Turkey in 1711. Prut operation. Materials from archives]. (SPb, 1898), pp. 229–231; J. Juel, 'Zapiski datskogo poslannika v Rossii pri Petre Velikom' [Notes of Danish envoy in Russia of Peter the Great] in *Lavry Poltavy* [Laurels of Poltava]. (Moscow, 2001), pp. 296–298.



117. The bombardment of Vyborg, 1710. (Alexey, Rostovtsev (1690–1746))

attack failed, others were sent by appointment. Commanders devised a structure of assault columns where detachments followed each other in certain succession. For example when storming the palisade of the Riga suburbs in June 1710, the order was as follows: a sergeant with 10 grenadiers in the spearhead, then a lieutenant with 30 fusiliers who had muskets on their slings behind and hatchets in hand, who were to run forward and cut through the stakes. These were supported by a lieutenant with 40 fusiliers and two lieutenants with 30-strong units on either flank. Then followed a captain with 60 men; then – commander of the attack – Brigadier Baron Schtoff with his lieutenant colonel, 50 grenadiers and 250 fusiliers; then three field guns; then the colonel with 500 men; all soldiers carried fascines (fascines or woolsacks were portable shelters which advancing men bore in front of them to cover them from enemy shots; once at the taken position, they were to build a lodgement out of these materials). There was a similar composition of storm columns at Narva and Vyborg. Several columns would attack the place from different directions.

At the storm of Narva Russian deserters – soldiers who ran from their unit and were caught – were ordered to carry and apply scaling ladders to the Honour bastion. It is known, however, that common soldiers including those from the Guards were given this task, too. In the planned storm of Vyborg in 1710 ladders were to be carried by convicts, ex-participants of the *streltsy*

Astrakhan rebellion of 1706 and Bulavin's Don rebellion of 1708; thus they were supposed to earn forgiveness.

When in an enclosed position, use of cold steel was also probable. Those who were not able to retreat when in defence would be stabbed. In the siege of Poltava when the Russians sallied it came to a hand-to-hand fight and the Swedish account mentions their stabbed soldiers in their trenches. Nevertheless, many descriptions of siege combat present musketry and hand grenades as the main means, be it in the trenches, or in palisades, or in breaches. Regular fire was probably something that officers tended to observe even in trenches – at least volley fire is mentioned in several occasions of clashes with Swedish sorties at Narva. Sniping was in some use as well: Swedish officer Robert Petre describes the rather efficient fire of Russian or Ukrainian marksmen from the Poltava ramparts onto the Swedish works. Lieutenant Colonel of the Preobrazhensky Guards, Dmitry Karpov, was killed in 1704 by the shot of a Swedish sniper from Narva.

It was a common understanding at those times that a place taken by force was subject to legitimate plundering by the winning troops. The inhabitants of Narva and Lvov suffered much after the storming of both places by the Russians and the Swedes respectively in August 1704, however in both cases the commander was interested in restoring order as soon as was possible. Elbing was taken without excessive violence over the townsfolk at all. The Swedish taking of several places in the Ukraine (Terny, Nedrihailov, Oleshna) ended with demolition of fortifications and houses with inhabitants and defenders alike as retaliation for stubborn resistance. The same was executed on the Ukrainian places of Baturin, Perevolochna, and Zaporozhian Sich by Russian troops that were sent to suppress rebellion and punish the treason of the anti-Russian minority among Cossacks.

The launch of a storm did not necessarily imply that the place would be taken with sword in hand. The assault on Noteburg lasted 13 hours and the Russians still did not mount the rampart, but Governor Schlippenbach seeing the exhaustion of his men, with no chances for salvation, preferred to capitulate. The Russian-Ukrainian garrison in Veprik had beaten off the Swedish storm with heavy casualties, however when Charles XII sent an ultimatum, the governor too preferred to surrender. Russian sources describe several repulsed Swedish storms on Poltava, although it is hard to find matching evidences in the other side's sources.

Still, the storm of a large fortress was a rare event and governors preferred to surrender before the besieger was ready for storm. For example, the governor of Vyborg was forced to negotiate after huge breaches were made in the rampart and assault troops were ready to attack. The agreement between the besieger and the besieged was called capitulation and could have been one of two types. 'On accord' meant the garrison was allowed to leave the place and march towards another friendly fortress with certain marks of honour (flags, drums, cannons, baggage) and this was the way most Swedish fortresses were accepted by the Russians, and Dunamunde by the Swedes in 1701. The alternative way was surrender 'on discretion', when the garrison became prisoners of war; Charles XII was not willing to allow honourable conditions

to the garrisons of Thorn and Veprik. The same fate, imprisonment, awaited the surviving defenders after a successful storm, of course.

After a fortress was taken and when a newly obtained place was of value to a victor, he would employ his troops to repair damage inflicted during a siege, demolish his own siege trenches and batteries, give the troops some rest and march them away, leaving some as a garrison. However, the victor could have ruined and abandoned the fortifications because they were either badly damaged in the course of the siege, they were of no use for the new owner, or it was impossible to hold the position in front of the approaching foe. So the Saxons blew up Kobron-schantz near Riga and Kokenhausen in 1701 when the Swedes approached; the Russians razed Marienburg, that was partially ruined during the storm in 1702; in 1716 they blew up castle of Kajaneborg after it was taken. The Swedes took and then blew up Birzha in Lithuania 1704; they also burnt a number of Ukrainian places after taking them in the winter of 1708–1709. Some places were destroyed long after the towns were taken, for example the Russians had to devastate Mitau and Bausk in 1706 and Dorpat in 1708, before an anticipated Swedish advance.

The surrender of a fortress was not the inevitable outcome of a siege. Succour could arrive to relieve and defeat the besieger in a battle (Narva 1700, Riga 1701, and Poltava 1709) or make him retreat without battle (Selburg and Pozen 1704). Sometimes the besieger raised the siege because he was short of resources (in Vyborg 1706 Russians lacked vessels for a sea blockade, and in Stralsund 1711 and 1713 the Allies lacked artillery).

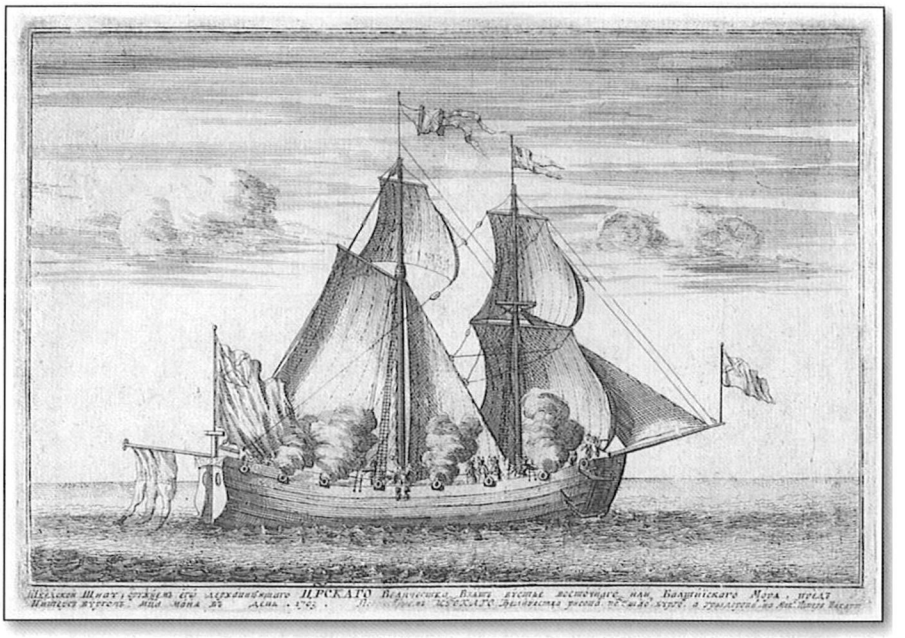
Overall, if one considers the Great Northern War and operations of the Russians elsewhere during these years, one can find no less than 90 cases when places were attacked and defended. This makes siege warfare a very important part of the integral war experience.

Naval Warfare

Lake and Riverine Warfare

Russia waged the Great Northern War mainly with the purpose of getting access to the Baltic Sea. This means that before the war started the Russians had rather limited experience with sea service and naval warfare. The most recent was in 1656 when they entered the Gulf of Finland on boats and captured an armed Swedish vessel near Kotlin Island (Retusari), but sea operations did not go beyond that. From 1696 onwards military shipbuilding started in the Azov Sea to oppose the Turks, however no sea fights occurred before the peace treaty with the Ottoman Empire was signed in 1700. Until Tsar Peter firmly obtained the Baltic seashore in 1703, Russia could not claim neither sea victories nor sea-serving forces.

On 12 May 1703 the small fortress of Nyenskans fell into Russian hands in the mouth of the River Neva. Peter was concerned that a Swedish squadron in the Gulf of Finland may had entered the Neva to help the fortress. In reality, Swedish Vice-Admiral Numers arrived late after Nyenskans had



118. Trophy Swedish snow ***Astrild***. 1703. The vessel must have been recovered, for it exploded and sank during the fight. (Pieter Picart (1668–1737))

already fallen, and only sent two vessels up the Neva on reconnaissanse.[94] The Swedes were spotted by Russian outposts on the shore, and the Tsar decided to act. The official relation read that a captain of bombardiers (viz. the Tsar) and a lieutenant of the same company (viz. Menshikov) were the only commanders with seafaring background. The actual commander of the task force was probably infantry Colonel Neitert. They commanded 20 to 30 unarmed rowing boats manned with grenadiers of the Guards and of some line regiments. The boats divided in two parties, one of which moved down the Neva through a bypass river and thus cut off two Swedish vessels – 8-gun snow *Astrild* and esping *Geddan 10* – from the sea and from their squadron; another part remained upriver while enemy vessels laid anchor in the middle of the Neva and waited until morning to set sail and join the squadron. Late in the night of 17 May, under heavy rain, the Tsar ordered an attack. The Swedes desperately defended with cannon fire and musketry but were soon boarded; most of the crews were cut down and despite the defenders' attempts to blow them up, both ships were captured. This fight was declared as Russia's first sea victory, the two commanders – whether they took part in the fight or watched near, remains unclear – were awarded the Order of St. Andrew the Apostle, and a medal was minted to commemorate it.

The motto on the medal read '*Nebyvaemoe byvaet*' ('the impossible had happened'). It meant that there were no cases before of the Russians gaining victory on the sea. Nor of course, had a Russian monarch ever taken part in such an action. But it did not mean that fighting on small boats was totally unheard of.

94 Actions against Numers on the waters of the River Neva and Lake Ladoga described in the most comprehensive study based on Swedish and Russian materials: D.A. Sidorov, 'Shvedskaia Ladozhskaia flotilla 1701–1703 g.' [Swedish Ladoga flotiliia 1701–1703] in *Menshikovskie chteniia* [Menshikov Memorial Readings]. (SPb, 2016) Vol. 7 (17). pp. 163–217.

119. Golden medal with slogan "The impossible had happened", 1703.

The Russian-Swedish border by 1700 fell across two large lakes, Peipus and Ladoga. The first action on Peipus occurred in October 1700 when Swedish Colonel Schlippenbach defeated some 12 Russian vessels from Pskov. In March 1701 King Charles XII ordered that both basins were to be guarded by two squadrons. Those small fleets were created in haste, lacking supplies and crews, but they consisted of yachts or brigantines armed with as many as eight to 10 cannon each. By their size and artillery, they were undeniably superior to any vessels that Russians had or could have had by then. This superiority could only be coped with by numbers and by special tactics.

By the start of the war Ladoga, Europe's largest lake, largely belonged to Sweden except for the south-east corner. The lake was controlled by a squadron of Swedish Vice-Admiral Numers, and Peter wanted vessels to confront it. The shipyards established in 1702 on the Rivers Svir (then known as Olonets yard, today Lodeynoe Pole) and Syas, flowing into Lake Ladoga, were to build small frigates for Petrine forces to oppose Numers, however the first ships were delivered only in 1703. In July–August 1702 the Tsar made his outstanding march (*Osudareva doroga*, Princes' road) from the White Sea southwards through the Karelian woods, with guards and court (arguably, they even dragged two singlemasted yachts *Courier* and *Saint Spirit* that were to fight the Swedish ships on Ladoga). As it turned out with the course of the

campaign, both precautions – building large vessels locally or dragging them from afar – did not work out that year, because a third plan did.

In April 1702 governor of town Ladoga Major-General Peter Apraksin arranged the building of a quantity of rowing boats, both small and large (on average, the boats accommodated 25 men) and constructed per pattern of vessels that the Don Cossacks used to use. Infantry Colonel Ivan Andreevich Tyrtov with his regiment (raised in 1700 in Kazan, in 1703 disbanded to strengthen the Tolbukhin Regiment) by then did have relevant experience of boat service on Lake Peipus, so the unit was transferred from thence to Ladoga. In June 1702 the Swedes and Russians exchanged raids on each others shore's, burning villages and stabbing cattle, however the fleets did not meet on the water. On 8 July the Swedish Ladoga squadron of eight ships approached the Russian shore at the mouth of the River Voronezhka and landed up to 400 men on boats to pillage yet another village; their larger vessels stood seaward as the depth did not allow them to come closer. Suddenly, the regiment of Lieutenant Colonel Ostrovsky (16 boats, each having 16 oars and 60–70 men armed with muskets and pikes, per Swedish report; 18 boats with 400 men per Russian source), came from the north. The enemy rushed to their boats and on them to the squadron, and were attacked by the Russians. In the ensuing fight the Swedes suffered casualties but broke through to the squadron. The Russians lost 13 men killed and wounded and claimed more than 150 enemy kills; the Swedes lost 27 and also claimed numerous kills. The reunited force of Numers then retreated northwards to Kexholm. The Russians on their smaller boats tended to stay out of deep water where the Swedish ships had superiority; the Swedes on the contrary lacked shallow vessels to pursue their foe inshore.

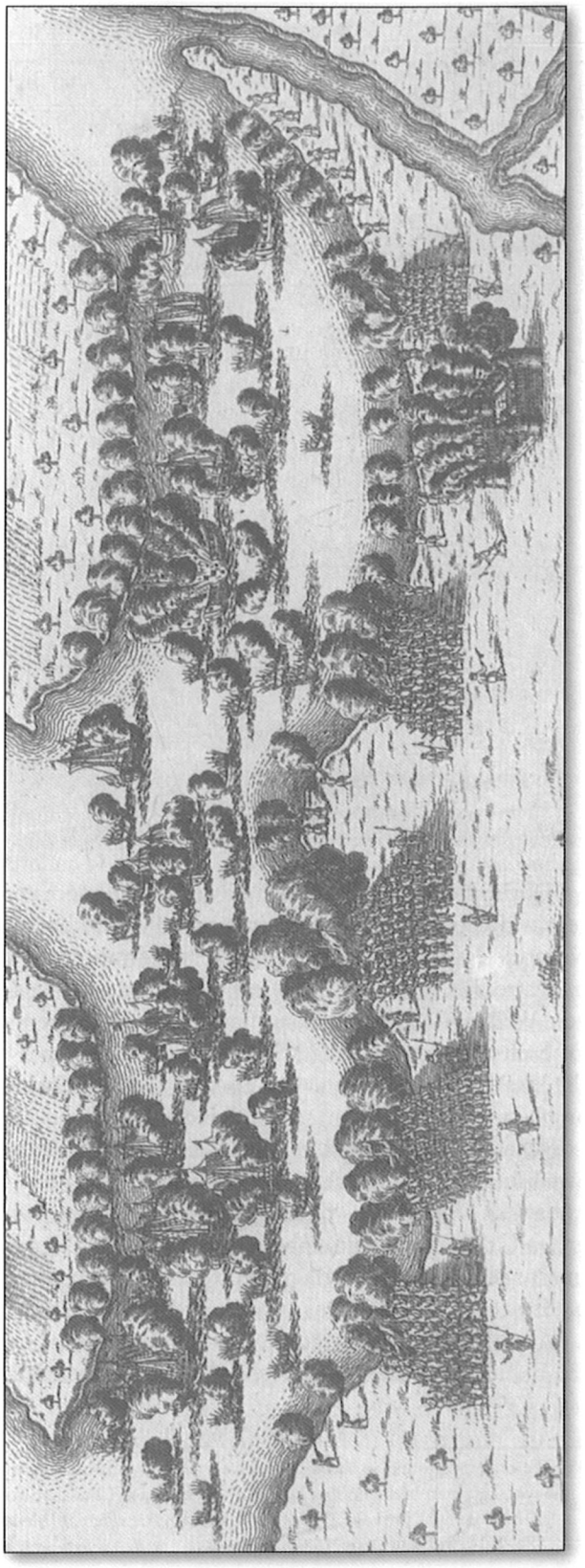
On 7 September 1702 Colonel Tyrtov with his 750-strong regiment on 30 boats set off from Ladoga town, crossed Lake Ladoga and the next day near cape Ledna-udd fell on two Swedish ships that were detached from the squadron. Swedish Tor 15 used its unconditional advantage in artillery to keep attackers at a distance, but they in turn ventured to come as close as was possible, where the defenders had to use hand grenades, incendiary shells and muskets. Several attempts to board the ship were repulsed; at a certain moment victory was near for the Russians since they managed to tear off the enemy flag. Finally, being unable to board the ship, they tried to sink it. The attackers approached from the rear, where the ship had no guns; using their hatchets, they started cutting below waterline and *Tor* leaked. Ober-Lieutenant Husman ordered a cannon brought to the cabin and fire case shot out of the rear window – thus they fended off attack from the aft, too. The double sloop that was on a tow after *Tor* was captured, however. After Colonel Tyrtov was mortally wounded with case shot from the enemy cannon (which means he actually led the attack), the Russians retreated. Despite noone from the Swedish squadron coming to help, *Tor* got away, having lost 23 men killed and wounded. Two weeks later Numers' squadron retreated from Lake Ladoga to pass via the River Neva and winter in Vyborg. Ladoga was thus cleared, which allowed the Russians to besiege and take the stronghold Noteburg on the island in the south-west corner of the lake

in October. Had the Swedes their ships in the lake then, they would have considerably hindered this operation.

The Swedes controlled Lake Peipus (*Chudskoye* in Russian) with a squadron that was created and based on Dorpat. Russian land forces under Field Marshall Sheremetev quartered in Pskov and Gdov on the other side of the lake; they used small rowing boats to cross the lake. The Swedish squadron first set sail in July 1701 having six vessels, and spotted some 40 enemy boats in the lake. The Russians immediately withdrew eastwards and entered some minor river where heavy Swedish ships could not follow them; still, one Russian boat was sunk by cannon fire during the pursuit, and another boat was captured in August. Besides, the Dorpat squadron was busy landing parties to burn Russian villages on the other side of Peipus and with shelling enemy infantry where it was visible on the shore. The Russians had smaller boats (so called *ostrovskie lodki*) without cannons so they were inferior in an encounter on open water; however they managed to send land troops to repel Swedish landing parties as well as sending parties of their own to devastate Swedish shores. Sheremetev, who governed in Pskov, ordered the construction of larger vessels that could face the Scandinavians and by 1702 Russians built up to 300 boats (*strug*) with oars and sail with a capacity of 20–30 men. The Swedes claim some Russian boats had cannons, which so far is not confirmed by Russian sources.

In 1701 the Russian swarm fleet evaded any encounter, but in 1702 they finally met and fought. On June 8, 1702 the Dorpat squadron under Commander Loeschern von Hertzfelt attacked the Russian detachment; Swedish relations say there were 100–200 boats with 50 men each, but in fact it was the Tolbukhin Regiment of 982 men strong. The Swedes, having supremacy in artillery, kept their distance. The Russians on the other hand aimed to close in and come within effective range of small arms and hand grenades. They surrounded the enemy vessels, tried to cut them one from another and board. In order to save one Swedish ship, another one rammed the midst of Russian boats and sank three of them. After a three hour fight, Tolbukhin withdrew to the Russian shore. Two days later the Swedish commander dispatched the yacht *Flundran* to Dorpat to resupply the squadron with ammunition. Shortly after her departure 40 Russian boats attacked, surrounded and captured her in view of the remaining squadron. For four days the Swedes then had to retire and defend the delta of the river Embach (Emajogi) against Russian attacks. On 21 July another Swede, the brigantine *Vivat*, sent alone on reconnaissance, was ambushed and captured. After commanding Russian Major-General Gulitz with his colonels visited the prize, drank to the victory and departed, *Vivat* suddenly blew up, killing the imprisoned sailors and their Russian escort. Seven out of 12 sunken cannons of the ship were recovered from 20 m water by artillery officer Gunther, according to his own report.

On 23 July the Swedish squadron again defended the delta of Embach, where the Russians had landed successfully and established two batteries. Badly outnumbered and having his ships severely damaged by enemy artillery, commander Loeschern retreated up the river to Dorpat where the ships were disarmed and stood under the protection of the fortress until the end of the season.



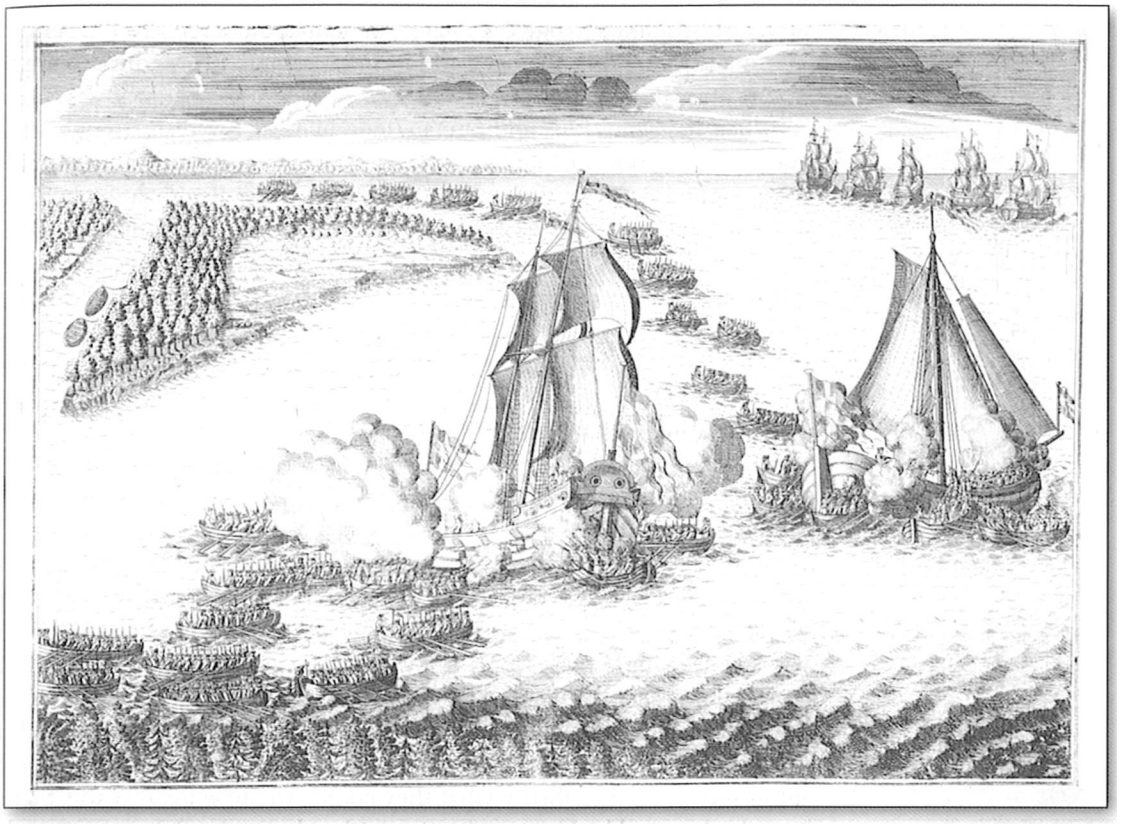
120. The battle on Lake Peipus [River Embach], 1704. Illustration in the Book of Mars, 1713. Fragment. (Alexey, Rostovtsev (1690–1746))

121. The "Russian Monarch sinks the enemy near Ekateringof, 1703", 1720s. (Bartolomeo Carlo Rastrelli (1675–1744) and Andrey Nartov (1693–1756))

During the 1703 campaign the Swedes built more new ships in Dorpat and regained control over Lake Peipus; the Russian boats again evaded clashes. Nevertheless, in 1704 the the Dorpat squadron ceased to exist after the battle of Kastre. The Russian infantry, nine regiments on boats under Major-General von Verden 7,278 men strong, managed to occupy the banks of the lower Embach just hours before 13 Swedish ships were to pass through its delta into the lake. Early on the morning 14 May 1704 the Swedish vessels fell into an ambush one by one, ran aground and were all captured except for *Karolus*, Loeschern's 12-gun flagship exploded soon after battle began. According to Swedish accounts, Russian soldiers and *streltsy* fired from ashore and did not attack on boats this time. Many Swedish sailors, when their ships hit the ground, managed to disembark and escape to Dorpat where they all were interrogated – their reports make excellent materials for the details of the last battle between the Russians and the Swedes for Lake Peipus.[95]

After Tsar Peter took control over both large lakes and gained access to the Baltic Sea in St. Petersburg, the Russians started using larger vessels, so

95 The materials found in Swedish archive by Bengt Nilsson and analysed by Dmitry Sidorov: 'Shvedskaia Derptskaia flotiliia 1701–1704 g.: bor'ba za Chudskoe ozero' [Swedish Dorpat flotilla 1701–1704: fight for Lake Peipus] in *Menshikovskie chteniia* [Menshikov Memorial Readings] (SPb, 2014) Vol. 5 (12). pp. 168–224.



122. Capture of two Swedish vessels at the mouth of the Neva on May 7, 1703. 1720s. Engraving by Alexey Zubov after Picart and Schoonebeek.

combat use of small rowing boats ceased. The only memorable return to this tactic happened in October 1706 when the Russians were besieging Swedish Vyborg in the north-east of the Gulf of Finland. The siege was a failure in part because the place was not blockaded from the sea and the besiegers did not have ships to cut Vyborg's sea communications. In an attempt to do this with what means were available, a sergeant, of the Preobrazhensky Life Guards Bombardier company, Mikhail Ivanovich Schepotev, assembled five local boats and manned them with five guard bombardiers and 45 line grenadiers. Their target was merchants off Vyborg who were bringing provisions to the besieged city; but in the darkness of the October night Schepotev's detachment missed its target and by surprise fell on two bigger military vessels. These were ships sent from the Swedish squadron to Vyborg, armed with four guns each and carrying 100 soldiers. This time it was in no way like in the early years when the Russians only dared to attack enemy ships with dozens of boats. Despite such odds, Schepotev attacked and in a desperate fight boarded *Esper* and captured it, imprisoned the surviving crew and beating off an attack from the second Swedish ship which came to help. When the detachment returned to the siege camp on the captured vessel with 28 prisoners, there were only 13 survivors, of whom only 7 seven were not wounded.[96] Sergeant Schepotev was killed in this action; all the

96 *Pisma i bumagi*, T. 4, pp. 309, 402, 403.

survivors promoted to officers and one of them, bombardier Naum Senyavin, later made a career in the navy and in 1721 became Rear-Admiral, the first among ethnic Russians.

When besieging Riga and Dunamunde in 1710, Swedish strongholds on the River Duna flowing into Baltic Sea, the Russians again had to cut the places' water communications. A detachment of the Kievsky Regiment on boats, led by Lieutenant-Colonel Klyachkovsky (700 musketeers and grenadiers and 300 Don Cossacks), was active on the Duna, preventing connections between the two places and fending off Swedish vessels that attempted to attack from the sea.[97] The clashes went on for about two months and some were rather hot, e.g. one officer reported having captured a Swedish artillery ship with 33 guns.[98]

Anti-Landing Operations or Coastal Defence

There were occasions when the Russians had to repulse Swedish attacks from sea. The first case was in 1701 when the Swedes attempted a naval attack on the city of Arkhangelsk on the White Sea, then Russia's only sea port and trade route to Europe. The city had no fortifications and Tsar ordered the building of a new fortress in the delta of the North Dvina river, on the fairway between the sea and Arkhangelsk; works began in May 1701. Meanwhile King Charles XII, knowing there were neither defences nor armed ships, sent a squadron of Commodore Lewe with seven ships with a mission to burn down the Russian port. Word about the approaching enemy arrived with Dutch merchants 10 days before the attack and local authorities rushed to fortify what they could. The new fortress was then in its early stage and had but one bastion with at least a partial parapet; so they erected batteries on both sides of the river and a redoubt for soldiers near the fort. Other channels were barricaded with palisades or sunken vessels. Having arrived at the White Sea, Lewe captured a fisherman's boat and pressed *pomor* (civilian sailor) Ivan Sedunov (more known as Ivan Ryabov in popular media) to be a pilot and show the way through the delta of Dvina. Then the Swedes captured a boat with a customs party and learned from customs interpreter Dmitry Popov about the new Russian fortress, however they knew the fortifications were too fresh and Lewe decided to demolish the construction site and attack Arkhangelsk. He sent forward his three smallest vessels up the Dvina on 6 July. They arrived under English and French flags and a boat with Colonel Zhivotovsky came to inspect them, but the Russian oarsmen spotted hidden Swedish soldiers and gave the alarm. The boat gave volley on the Swedish ship, killing its captain, and rowed away in retreat. The Swedish vessels chased and two of them ran agound, supposedly thanks to the Russian prisoners Sedunov and Popov who were on the front ship; both were shot but Sedunov survived and eventually swam to the shore. The Swedish *Mjohund* and *Falk* found themselves trapped under the guns of the new fort, and the batteries that opened fire. Both ships had their bows towards the fort so could not bring their board guns to bear. After a lengthy

97 Gistoriia Sveiskoi voiny, Vol. 1, pp. 341, 342.

98 N.N. Popov, *Istoriia 2-go grenaderskogo Rostovskogo polka* (Moscow, 1902), Appendix, pp. 29–30, 155.

cannonade, the surviving crews escaped to the third ship and withdrew. The victorious Russians rowed to seize the trophies, but one galiot exploded. The attempt on Arkhangelsk was thus beaten off. Lewe remained in the White Sea capturing fishing boats, imprisoning locals, and burning villages, until the Swedish squadron sailed back home to Gothenburg. The new fortress, Novodvinskaya, was finished only in 1705; throughout all the war years it anticipated another enemy attack but it never happened.[99]

At the start of the 1704 campaign Tsar Peter was planning to besiege Kexholm and at the same time he sent a detachment under Petr Matveevich Apraksin to occupy the mouth of the River Narova, which connected the Swedish fortress of Narva with the sea. It was known that town wanted supplies and that Swedes would be sending provisions by ship from Reval. Time was dear to both sides and they set out as soon as navigation opened. Four merchant ships managed to pass through the mouth and unload in Narva before the Russians came but the next day, 8 May, Apraksin arrived. Finding the Swedish convoy off the mouth, he hastily established a battery on the east bank of the Narova and built a fortified camp for his infantry. Field pieces were not available to Apraksin by then, so he had to take cast iron guns of poor quality from the nearest fortress, Yamburg: these were six 3 pdrs and three 6 pdrs. On 9 May 1704 two Swedish brigantines from the convoy – *Jungfrun* 14 and *Wäduren* 14 – came up the river and opened cannon fire on the Russians while mortar ship *Wulcanus* threw bombs from afar. The Russians returned fire, several men on the battery were injured and one cast iron 3 pdr exploded. Still, the gunfire was intense enough that one of the brigantines was hit in the board and both ships pulled out of the mouth with the help of rowing boats. After that Apraksin strengthened his positions and begged the Tsar for reinforcements – he was very frightened about being attacked by the strong Swedish squadron. At the same time, Vice-Admiral Jacob de Prou, a Frenchman in Swedish service who had battleships, frigates, brigantines, and galleys, with two foot regiments on board, only bombarded from a distance and did not attempt to attack the mouth of the Narova again. On 21 May he disembarked one foot regiment on the shore 30 km to the west of the mouth, and it was the only support Narva received during 1704. This action, as insignificant as it was, had a dramatic outcome for Narva, because the region's strongest fortress found itself in blockade and afterwards was besieged and taken.[100]

In June 1704, after the failure off Narva, the Swedish fleet discovered that the mouth of the River Neva in the Gulf of Finland was now guarded by Fort Kronslot. The Russians built this two-level round tower in the winter on shallow water near the only passable fairway next to the island of Kotlin (Retusari) and the island itself now had several batteries. De Prou approached

99 *Trevozhnye gody Arkhangelska 1700–1721. Dokumenty po istorii Belomoria v epokhu Petra Velikogo* [Troubled years of Arkhangelsk 1700–1721. Documents about the history of the White Sea region in the time of Peter the Great] (Arkhangelsk, 1993).

100 N.P. Volynskii, *Postepennoe razvitie russkoi reguliarnoi konnitsy*, T. 3, pp. 10–11, 30, 35; 'Narva's Belagerung und Einahme von den Russen, nach Aufzeichnungen dasiger Einwohner in Jahre 1704' in *Archiv für die Geschichte Liv-, Esth-, und Curlands* (Reval, 1851), Band. VI, Heft. 3, p. 242.

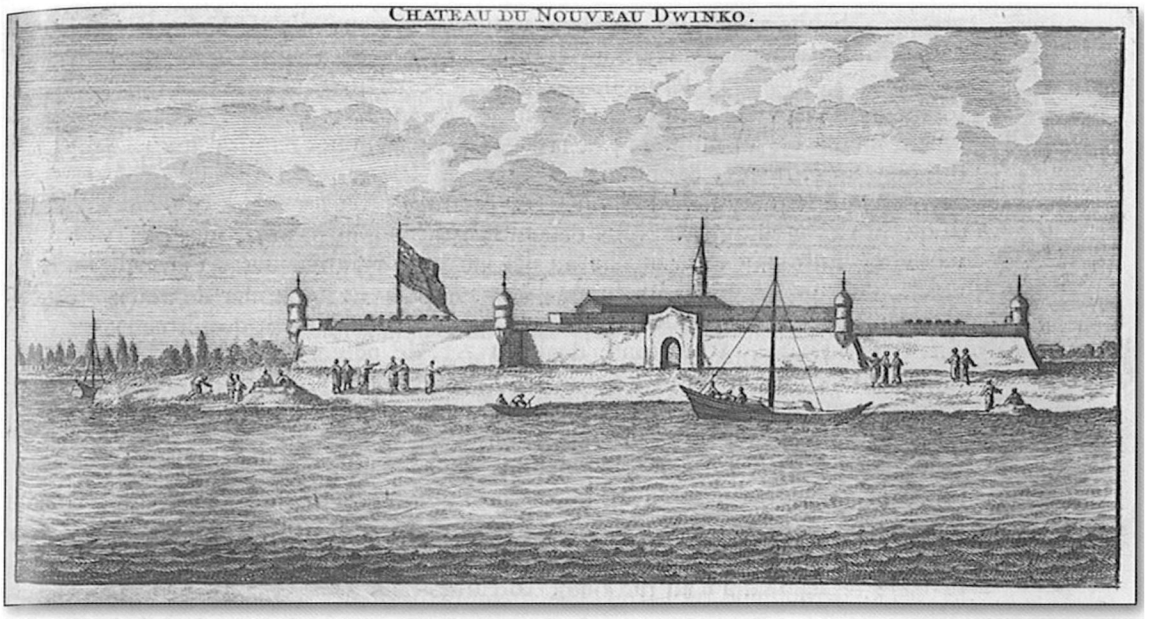
Kotlin and Kronslot in June and then in July 1704 but could do little harm to the new enemy positions. Accounts vary on whether de Prou attempted to descend on Kotlin and attack Kronslot; he surely bombarded both with no results and withdrew. His inability to break through into the Neva led to the failure of the Swedish land forces of Lieutenant-General Maidel in their attack on St. Petersburg that year. In January 1705 the Swedes under Armfeldt, most known for the 1719 winter 'death' march in Norway, came over the frozen gulf and temporarily occupied Kotlin, but were unable to take Kronslot as the Russians broke the ice around the fort making it impregnable. Later, in summer 1705, another admiral, Baron Cornelius Anckarstjerna was sent with a considerable squadron to reduce the Russian fortifications and annihilate the new enemy fleet. The commander of the Russian Baltic fleet, Vice-Admiral Cornelius Cruys (Cruijs), a Norwegian from the Netherlands who enlisted in Russian service in 1698, lined up his ships and galleys under the guns of the fort and the coastal batteries. There was no hope that the newly created fleet could stand against the more experienced Swedes in open sea. John Deane, a British navy officer in Russian service in 1711–1723, wrote about the 1705 events:

> The Swedish fleet would all come, cannonade, and sometimes bombard them; but never made a bold attack, deterred with the appearance of a fortification, of an orbicular form, that could bring few guns to bear. Had they once pushed in, the batteries could have done little damage, and a few single-decked ships might have easily been destroyed; the Russians expecting no less.

The first landing came on June 16 when Swedish infantry on boats departed from the squadron and approached Kotlin. Grenadiers were first to disembark while others started unloading *chevaux-de-frise* to protect the landing spot, but Russian infantry lying concealed on the ground stood up and gave such brisk musket and canister fire that the attackers withdrew in disorder with great loss.[101] On 25 July Anckarstjerna made another attempt. The bombardment was so heavy that, per the relation, the batteries on Kotlin were damaged and some trees were torn away complete with their roots.[102] The garrison foot soldiers – Colonel Fedot Semenovich Tolbukhin's Regiment – lay hidden again. The Swedes attempted to land in boats, but 'acted as if they had never been upon the coast before', as Deane put it.

> For generally all round the island is shoal water, and uneven stony ground; but the water was deeper than ordinary betwixt the place of the Swedes' descent and the shore, taking the soldiers up to the chin, and wetting their powder and arms; whilst the Russians lying concealed in the island, then all a wilderness of trees and shrubs, observed their miserable condition; and, permitting them to gain the shore, attacked them at this disadvantage, and obliged them to return to their ships with very great slaughter.[103]

101 *Gistoriia Sveiskoi voiny*, Vol. 1, p. 252; [Vedomosti] *Vedomost moskovskaia* (Moscow, 26 June 1705).
102 [Vedomosti] *Podlinnoe donoshenie* (Moscow, 14 September 1705), pp. 3–4.
103 [J. Deane], *History of the Russian fleet*, p. 12; see also: *MIRF*, T. 1, p. 74.



123. Fortress Novodvinskaya in 1708. Illustration from Bruijn's *Voyages par Moscowie, en Perse, et aux Indes Orientales*, (1718). (Cornelis de Bruijne (1652–1727))

The Tsar wrote several instructions to the governors of the sea forts. The document sent to the governor of Novodvinskaya fortress on the White Sea in 1702 and repeated in 1714 gave rules for inspecting and saluting incoming vessels. In case of attack, booms made of wooden logs, ropes and chains were to be prepared, men distributed on their posts, gunners and musketeers were to aim sharp, guns to be thoroughly sponged.[104]

On June 13 1714 Peter emphasised that unlike land forts, those on sea could be attacked suddenly given that enemy ships had favourable winds. That is why men in shifts together with an officer were to be present on a battery 24 hours a day, guns were loaded all the time, and their gunpowder was to be taken out and dried once in a week. The alarm sign was a triple discharge and a red flag on the battery. Cannons were loaded with live shot, but for saluting purposes the balls were taken out of barrel with a cord attached to the projectile. The instruction from 14 May 1704 for the governor of Kronslot, Colonel Treyden, described how to inspect and salute neutral ships; as to the combat, guns were to allow enemy ships as close as possible and fire one after another without haste, so that when the last gun was fired the first gun was already reloaded. Branders (fire ships) were a particular threat to the fort given its' wooden structure.[105]

The combat use of branders was not recorded during the Great Northern War but we know of at least one attempt. Menshikov, as Governor of Ingermanland, had high command over the troops and navy in the region in 1711 when the Tsar was away on the Turkish campaign. He insisted on

104 I.M. Gostev, 'Teksty pervykh instruktsii komendantam beregovykh primorskikh krepostei 1702–1714 gg.' [The first instructions to governors of coastal fortresses 1702–1714] in *Pamiatniki fortifikatsii: istoriia, restavratsiia, ispolzovanie.* Sbornik statei i materialov I mezhdunarodnoi nauchno-prakticheskoi konferentsii 18–19 sentiabria 2009 g. (Arkhangelsk, 2012), Vol. 1, p. 39.

105 *Pisma i bumagi*, T. 3, p. 55.

arranging a brander attack on Swedish ships laying off Vyborg. Two branders were prepared and officers and men appointed on them but shortly before the planned attack all the foreign officers requested to leave the Tsar's service than go on this mission.[106]

Probably the last Swedish attempt on a Russian port was made in June 1715 when Lillje's 12 ships of the line entered Reval bay and bombarded the port and the fleet. The Russians lost five men killed and returned fire from coastal batteries and prams, so that reportedly one of the Swedes had to leave the line. After two hours' cannonade Lillje withdrew.

Landing and Amphibious Actions

The Petrine forces at times had to attack shore positions from water. Two Swedish fortresses besieged by the Russian army in 1702 were located on islands. At Noteburg many rowing boats were distributed among assault troops who brought scaling ladders with them. They rowed down Lake Ladoga where the Neva River flows out of it, and under fire approached the stronghold on island. The attempts to mount breaches and a bloody fight lasted 13 hours, and more boats were sent to bring fresh troops and evacuate the wounded; reinforcements were sent in vain and several men retreated on boats (for their cowardice an ensign and 22 men were sentenced to death afterwards). At a certain moment the commanding officer of Semenovsky Guards, Lieutenant-Colonel Mikhail Golitsyn, ordered the pushing away of empty moored boats so that the soldiers did not have a way to retreat from the island.[107] This showed the determination of the besiegers and eventually the garrison surrendered.

Two months prior to that, troops of Field Marshal Boris Sheremetev attacked the small island castle of Marienburg in Livonia. The lake around it was not large so there were no local boats, nor did the army bring any: so they had to build rafts. On 5 September 1702, three hours before dawn, the Russian infantry on rafts started the assault from two sides. Both columns came under heavy fire and lost dozens dead and wounded by grapeshot, but the advance continued. At the same time an ongoing bombardment made a practicable breach which made the governor ask for capitulation, so the troops landed when the shooting stopped.[108]

The use of rafts once occurred in a battle in Finland, a land known for its water obstacles. On 17 October 1713 the Swedish army under Major-General Armfelt defended a fortified position behind a relatively short stream flowing between two lakes. Before attacking the enemy front – a costly action for certain – Russian commander-in-chief Fedor Apraksin sent 6,000 force on rafts over the lake on the Swedish right flank. This manoeuvre, led by the Noteburg hero Mikhail Golitsyn, now Lieutenant-General, as expected made the Swedes

106 *MIRF*, T. 1, pp. 251, 252, 254, 262.

107 *Gistoriia Sveiskoi voiny*, Vol. 1, pp. 98–99.

108 B.P. Sheremetev, 'Voenno-pokhodnyi zhurnal 1701–1705' in *Materialy voenno-uchenogo arkhiva glavnogo shtaba*, T. 1, (SPb, 1871), pp. 112–113; N.P. Volynskii, *Postepennoe razvitie russkoi reguliarnoi konnitsy*, T. 1, p. 120.

divide their troops, and then the frontal attack started with dragoons fording the river on horse and infantry also crossing it on rafts. Eventually, despite a stubborn defence on his main position, Armfeldt withdrew under threat of encirclement, and the battle of the River Pälkäne was won.[109]

A sea landing operation was carried out in Finland earlier in the same year. On 11 May the Russian galley fleet came to Helsingfors (Helsinki), a city with a Swedish garrison and coastal batteries. Two prams or artillery ships advanced to cannonade the batteries, and a bomb galiot bombarded the place and set the town on fire. In the night the army started disembarking from galleys, meanwhile the Swedes and local civilians fled towards Borgo (Porvoo). When troops entered the place in the morning it was all in flames; Cossacks were sent to chase the enemy and the soldiers started looting until 3 p.m. when they went back on board and the fleet went away, having devastated the remnants of the town.[110]

In September 1716 during the fruitless rendezvouz of the Allied fleets at Copenhagen, Peter and General Weide on two snows ventured from Copenhagen towards Malmo where they observed the Swedish coastal batteries and exchanged fire with them. *Princess*, with the Tsar on board, was hit with a ball and *Lizette* had two reins broken. At the same time a Russian reconnaissance party was sent to the shores of Skone. Three galleys with mounted Cossacks, escorted by two ordinary galleys under the command of Guards Captain Fedorov and navy Lieutenant Captain Mukhanov disembarked in the dark, fell upon the enemy sentries and captured three men. These prisoner Swedes were brought to Copenhagen and interrogated; the Allies learned from them that the Swedes had 20,000 troops in Skone and the coastline fortified with numerous redoubts and batteries.[111] This episode in 1716 was probably the first case where the Russians landed on the Swedish shore. Large scale landings followed in 1719.

The largest battle fought by a landing force was near Stockholm in August 1719.[112] In July Apraksin's armada of 132 galleys, supported by the sailing fleet of 21 ships, passed from Hanko through the Åland Islands towards Swedish shores. The galleys entered the Swedish skerries and divided in two. Apraksin with the main force raided the area around Stockholm from Norrtälje to Norrköping; a squadron under Major-General Lacy went northwards and burnt Östhammar and Öregrund and had two successful actions. Apraksin received an order to stop these ravages, and before returning to Åland to

109 *Kniga Marsova* (1766), p. 162; *Gistoriia Sveiskoi voiny*, Vol. 1, pp. 401–402.

110 *Pokhodnyi zhurnal 1713 goda* [Campaign journal of 1713], (SPb, 1854), pp. 25–26.

111 *Gistoriia Sveiskoi voiny*, Vol. 1, pp. 457–458.

112 *Vedomosti*, 15 (SPb, 30 August 1719); S.V. Efimov, 'Russkii medved u vorot Stokgolma. Mify i realii srazheniia pri Stekete 13 avgusta 1719 g.' [Russian bear at the gates of Stockholm. Myths and reality of the battle at Stacket on 13 August 1719]. Proceedings of the *Voina i oruzhie. Novye issledovaniia i materialy. Trudy Shestoi Mezhdunarodnoi nauchno-prakticheskoi konferentsii 13–15 maia 2015 goda* [War and Weapons. New studies and materials. Works of the 6th international conference, Artillery Museum, 13–15 May 2015], (SPb: VIMAIViVS, 2015), Vol. 2, pp. 175–99; B. Megorsky, The Action at Stäket, 1719 per Russian Regimental Archive <https://www.academia.edu/9864999/The_Action_at_Stäket_1719_per_Russian_Regimental_Archive> (accessed 4 April 2017).

reconnoitre nearby passages and fortifications on the way to Stockholm, with a view to going there in the next year. For this, on 24 August, he detached galley Rear-Admiral Zmaevich towards Vaxholm and Stacket Sund. The Swedes had blocked the strait with sunken vessels and erected fieldworks around it. To the north of Stacket Strait galleys disembarked three battalions under Colonel Strekalov – this force did not take part in the action against the Swedes. The other three battalions under Colonel Prince Boryatinsky went south of the strait. Both detachments were to follow Apraksin's instruction:

> March along the left side [for Boryatinsky and right for Strekalov] of the strait Stacket as far as one or two mileposts. Move as close to the shore as possible and look out for enemy batteries and sunk vessels. If you find them and the enemy will not be stronger than you, destroy the batteries, examine sunk vessels, occupy the spot and immediately send dispatch to us. Send Cossacks half-mile in front of you so that the enemy did not cut you from the fleet; venture to capture prisoners for interrogation. Don't march farther than half-mile away from the fleet; when turning back send two or three parties to the sides. Royal factories and nobility mansions, if found, to be devastated; burn crops on the field both harvested and unreaped; take goods with you.

Boryatinsky landed at 7:00 p.m. in the afternoon and went inland to a distance of 1/8 mile (roughly 930 m, given the mile is the old Russian mile of 7,467 m) where he saw the enemy remaining behind stones in defence. The Swedes attacked with two regiments of foot and one regiment of cavalry; the fight lasted an hour and a half, the Swedes were repulsed and Boryatinsky remained on the field until the next day when Apraksin sent an order to go back to the galleys. The text of the official relation, exaggeratedly, emphasised that the battle was notorious for the Swedes outnumbering the Russians in infantry, and had cavalry and cannons which the Russians did not have at all. Also, prisoners related that Swedish troops came there with Prince Hessen-Kassel, the spouse to the Queen. Materials from the regimental history of the 2nd Grenadiers reveal some interesting peculiarities about how the landing was organised. Boryatinsky's detachment was not in fact three full battalions but rather 13 assorted companies from 11 different regiments. Of them, three or five companies stayed in 'picquet' on the shore near the moored galleys and marched to succour Boryatinsy after the firing started. Except for regular infantry, several dozen Cossacks must have been present also, for officers of the Arkhangelogorodsky and Galitsky Infantry recalled that they disembarked together with Cossacks from horse galleys. The combat was probably a regular firefight, as participating officers testified that their companies stood in the line of battle and exchanged fire with the Swedes at a distance of just 20–30 metres. The action lasted until the end of the day and must have been rather hot, given that Boryatinsky's force lost 104 killed and 328 wounded out of his roughly 1,300–1,500 men; the Russian infantry retained their position after the fight ended and started 'collecting bodies'. The Grenadiers must have been employed in storming the Swedish fieldworks, at least the company of 2nd Grenadiers spent an extraordinary amount of an average 62 fusil rounds and four grenades per man; grenades

must have been helpful in the attack of a defensive position. This possibility is backed with two personal accounts: one individual claimed he was 'at storm at Stacke', and another was wounded in his head with a sword – something that cannot happen in a mere skirmish.

The night passed without contact with the enemy and the next day some troops were sent 'towards Swedish galleys' (per officers' autobiographies), so there was some continuation of the action another day. Ultimately the entire landing force freely returned to the galleys. This gave the Swedes cause to claim victory because the enemy was stopped at the gates and turned backwards. This was rather convenient for the Prince Consort, who now behaved as defender of the capital city of the kingdom and soon was to be made the king. At the same time Russian troops achieved their goals – limited from the beginning, as is clearly seen from the instruction – and had neither the intention nor enough strength to actually press on to Stockholm. The after-action testimonies imply that during the combat the troops were orderly and their officers, who were mainly junior officers, were rather confident in front of the enemy in a situation when a detachment ventured into enemy land with unknown defensive forces, fortifications, and vessels in surrounding skerries.

Actions of Galleys

On 29 August 1705, shortly after the failed Swedish attack on Kronslot, one of their cruisers – *Revel* 36 – was left to observe Kotlin Island. Vice-Admiral Cruys ventured to attack her with seven galleys during a calm. The galleys formed a line and opened fire while waiting for the rearmost galley to join in; *Revel* returned fire and the cannonade lasted for half an hour. Five cannonballs hit a galley, which killed three men and wounded 13; another received three hits. Cruys of course reported that the Swede was badly damaged too. The galleys were finally about to close in to assault the enemy when a westerly wind arose and *Revel* got away. The galleys chased her six miles towards the Vyborg coast, but the oarsmen became too tired and could not keep up with the sailing ship under a fresh wind.[113]

In 1707 Russian rowing vessels ventured as far west as the island of Hogland. In 1708 a squadron of nine *scampavias* and seven Russian brigantines under Bocis reached the Finnish coast where they landed parties to ravage the settlements; they sent 500 soldiers who attacked and burned Borgo (Porvoo). Bocis wrote that he very much needed pilots who would know ways through the Finnish skerries; the two local pilots he had captured killed themselves.[114] In the same campaign Swedish General Lubecker attempted to attack St. Petersburg and aimed to cross the River Neva. Not knowing where to expect an enemy crossing, Apraksin – who commanded the defence – spread his vessels all along the river. Three kilometres down the mouth of the River Tosna two Russian brigantines under Lieutenants Naum Senyavin and Lorents attacked the Swedish corps building pontoons; in the ensuing cannonade against eight enemy field guns the brigantines suffered

113 *MIRF*, Vol. 1, pp. 76, 94; Anderson, R.C., *Naval wars in the Baltic during the sailing-ship epoch, 1522–1850* (London, 1910), p. 140.

114 *MIRF*, Vol. 1, pp. 154–158.

124. Swedish descent on the island of Kotlin repulsed in 1705. 1720s. (Rastrelli, Nartov; author's photo)

damage and casualties and had to withdrew, thus allowing the enemy to cross the Neva. Rear-Admiral Bocis with more vessels heard the cannonade but did not support Senyavin and went to Shlisselburg.[115]

In 1710 the main feat of the Russian Baltic fleet was coming in May to Vyborg before the Swedish fleet arrived, bringing supplies to the besieging corps that had attacked Vyborg since March and by then was in dire need of ammunition and provisions. An armada of 270 military and cargo vessels set out from Kotlin even before the ice was totally gone and successfully made it to Vyborg and back again. Eyewitness Just Juel wrote that, firstly the Tsar's fleet set out so early that the fairway was still under floating ice; secondly that the fairway was dangerous, having numerous shoals and there was not a single pilot in the fleet who would know them; thirdly, that all vessels of the fleet were built of pine and were not fit for seafaring; fourthly, that cargo vessels were steered by peasants and soldiers who hardly knew what to do. Despite it often looking as if the vessels were about to be carried away with floating ice towards Swedish shores, the whole enterprise ended successfully. Juel attributed the success to the Russians' courage and above all to the Tsar's luck, for just two days after the fleet returned to the bay a Swedish squadron of eight battleships arrived that for certain would have easily destroyed and dispersed the Russians.[116] In 1710 the Swedish navy could not prevent the Russians taking seaside places such as Riga, Dunamunde, Pernau, and Arensburg.

115 *Ibid.*, Vol. 1, pp. 168–171.

116 J. Juel, 'Zapiski datskogo poslannika v Rossii pri Petre Velikom' (Moscow, 2001), pp. 173–174.

In 1712 despite the Swedish squadron of Admiral Wattrang lying in Björkösund south-east of Vyborg, Bocis' galleys managed to pass it and reach the Finnish coast. Near Wickolax (Fredrikshamn, Hamina) 12 *scampavias* and 11 brigantines attacked and captured the snow *Kraft* (14 three pdrs and 11 swivels) and two four-gun boats. The snow fired two board volleys and killed 32 Russians. At the head of the attack was the *scampavia*, *Lvitsa*, of Captain Andrey Miyuschik; she had 12 grenadiers on board and they hurled six hand grenades before the Swedes on the snow waved their hats and begged for quarter. The boats surrendered after this and a total of 143 men were captured.[117] This was probably the first victory of the Russian galleys.

Later that year those 23 galleys accompanied Apraksin's army in its first land campaign in Finland, but that number was in no way sufficient for transporting a big army. In October 1712 after Apraksin's operation was over, Peter planned in the coming campaign to transport 9,000 infantry across the Finnish skerries on 100 brigantines, to attack enemy troops from the rear. This was the development of the 1710 Vyborg operation where Apraksin's troops marched on the enemy shore over ice and cut off the town from the rest of the enemy territory. It was essentially the idea of the so-called 'army fleet', which was to aid the movements of land forces and which helped a great deal in conquering Finland in years to come.[118]

The galley armada that advanced on Helsingfors in May 1713 included more than 200 vessels built in wintertime – three half-galleys, 60 *scampavias*, 30 Russian brigantines, 60 *karbas*, 50 boats, two prams and two bomb galiots, all organised into three equal parts. The van was under Rear-Admiral of the sailing fleet Peter Mikhailov (i.e. the Tsar) whose vessel bore a red pennant; the *corps-de-bataille* under General-Admiral Apraksin had a white pennant; the rear under galley Rear-Admiral Bocis had no pennant. In turn, each part consisted of three squadrons. A half-galley had 250 men onboard, a *scampavia* 150, brigantine, *karbas* and a boat 70, 60 and 30 respectively. Overall the armada carried 16,950 men.[119] When the infantry disembarked, the vessels were to be guarded by a certain number of marine soldiers: 60 on a half-galley, 20 on a *scampavia*, 10 on a brigantine or *karbas*.[120]

Besides galleys there were numerous small craft, *karbas*, with provisions and ammunition: they accompanied their parent squadrons and in battle might have been thrown into confusion. Thus the Tsar ordered that when the enemy was in sight, those small vessels were to leave their squadrons and gather together in the rear, covered by three brigantines and three boats from every squadron.[121]

The order issued in the galley fleet on 17 May 1713 specified what measures were to be taken for the security of the armada. During the day

117 *MIRF*, Vol. 1, pp. 313, 318, 322; see comment by Krotov in a Russian translation of Deane (J. Deane, *Istoria rossiiskogo flota* (SPb, 1999), p. 159; Anderson, p. 151.

118 MIRF, Vol. 1, p. 324.

119 A.Z. Myshlaevskii, *Severnaia voina na Ingermanladskom i Finliandskom teatrakh v 1708–1714 gg. Dokumenty gosudarstvennogo arkhiva* [Northern war on Ingermanland and Finland theatres in 1708–1714. Documents form the State archive]. (SPb, 1894), p. 384.

120 F.F. Veselago, *Ocherk russkoi morskoi istorii*, Part 1, (SPb, 1875), pp. 224–225.

121 MIRF, T. 1, p. 366.

one *scampavia* marched in advance at a three cannon shot distance; narrow passages were first reconnoitred by boats. In the night all routes to the squadron anchorage were guarded by a *scampavia* at one shot distance with two boats further in the same range. The men disembarked to cook food and had to return on board after that.[122]

The main value of the galley fleet was its ability to transport large land forces along the coastline. It was especially relevant in Finland where rocks, numerous rivers and lakes, morasses and scarce roads between them hindered the passage of an army in summer. The advance of galleys near the shore could only be stopped in a few places in Finland where the depth allowed Swedish men-of-war to come close. In 1713 a Swedish squadron of sailing ships under Vice-Admiral Lillje arrived at Tverminne in the western part of the Hanko peninsula and checked the advance of Apraksin's galley squadron towards Åbo. Hanko is also the place where the narrow Gulf of Finland enters the open Baltic. During the next year, 1714, both sides would again outrun each other at Hanko, where the battle of Gangut (Russian derivative from Hangoudd, Swedish) was to happen.[123]

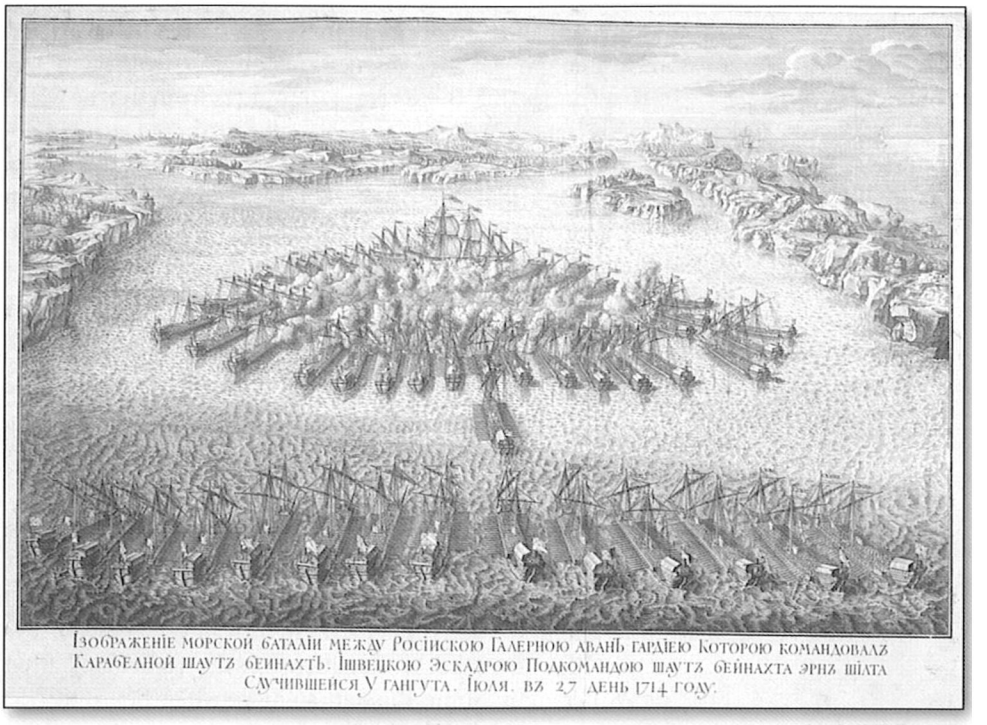
In 1714 the Swedish squadron arrived at Hanko in considerable strength. There were four flag officers – Admiral Wattrang, Vice-Admiral Lillje and two Rear-Admirals (*Schoutbynachts*) with 15 battleships and several smaller vessels. The Russian galley fleet of 99 vessels consisted of three squadrons (van, core and rear) and these were divided into three 11 galley-strong divisions. General-Admiral Apraksin with this armada moved from St. Petersburg to Helsingfors and further west and again was stopped near Tverminne. Apraksin was not sure what to do: either ask the Tsar's sailing fleet to come to its aid from Reval, winter right there, or wait for calm and try surpassing the Swedes in open sea.

The Tsar arrived on 1 August and ordered preparations to drag several galleys across the isthmus to the western side of Hanko. This path for hauling small ships in the narrowest place was known to locals since the Middle Ages, and even Wattrang in May 1714 noted this drag was crucial and should be under Swedish control. Now the Tsar's infantry (100 men from every foot regiment and 50 men from every guards battalion) set out to build a 2,527 m long wooden railway-like construction. The idea was to carry over just two scampavias in order to confuse the enemy. As soon as Wattrang learned about it from local peasants he sent Rear-Admiral Ehrenskold with nine flags to meet the Russians at the end of their portage and attack them.

The military council decided to send the van squadron under galley captain-commodore Zmaevich and Brigadier Volkov beyond enemy ships over the open sea once a calm allowed. This daring move was carried out by 20 galleys, and shortly afterwards by 15 more, on the morning on 6 August. After Zmaevich completed his manoeuvre, Admiral Wattrang being unable to stop the Russians in the calm now took steps to prevent the remaining

122 A.Z. Myshlaevskii, *Severnaia voina na Ingermanladskom i Finliandskom teatrakh v 1708–1714 gg. Dokumenty gosudarstvennogo arkhiva* [Northern war on Ingermanland and Finland theatres in 1708–1714. Documents form the State archive]. (SPb, 1894), pp. 382–383.

123 P.A. Krotov, *Gangutskaia bataliia 1714 goda* [The Battle of Gangut in 1714] (SPb, 1996).



125. The Battle of Gangut (Hanko), 1714. 1720s. Print by Maurice Baquoi (1680?–1747) after painting by Pierre Denis Martin the Younger (1663–1742).

Russian fleet going the same way: he ordered that Lillje joined his main force and his inshore ships were warped out, fearing they could be attacked by the Russians. Early in the morning of 7 August Apraksin with 63 galleys moved in the now free passage between Wattrang and the shore. The Swedish ships, still becalmed, fired from afar and with little result despite their efforts to tow into range. Some 250 shots were recorded by the Russians but few ever reached the target. The galley of the Nizhegorodsky Regiment was hit and Lieutenant de Kohler shellshocked (he recorded that the heels and soles of his boots were torn off by a 24 pdr ball). Half-galley *Sazan* of the Shlisselburgsky Regiment ran onto a shoal and rescued several men on a boat before Swedes captured the vessel with 232 men including six sailors.

Schoutbynacht Ehrenskold found himself blocked by the whole Russian fleet in Rilaks fjord and took a defensive position at the narrow passage. Pram *Elefant* 18 took the centre with her broadside bearing, three galleys were on either side with bows towards front, all that could fit between two islands; two boats were thus left in the second line behind the pram with most of their crews transferred to the first line. Larger galleys with stronger crews – *Trana* (147 soldiers, sailors and officers), *Orn* (149), *Grip* (151) took the flanks, while the smaller *Laxa* (76), *Gadda* (82), and *Hvalfisk* (76) leaned towards a pram (256), total 937.

The narrow passage only allowed a few Russian vessels to advance, so only 23 galleys of the Russian van saw action. Apraksin and Peter planned to attack on both flanks and made their disposition accordingly. The centre consisted of 11 *scampavias* in one line with a total of 854 infantry; both wings consisted of six vessels in two lines but were much stronger for there were larger half-galleys. The left wing had 1,273 men and the right wing

1,461 men. The soldiers in all three sections came assorted from 15 infantry, grenadier and guard regiments, contributing from 88 to 325 men to the task force. Besides this, there were 110 soldiers from the the Marine battalion and 89 servicemen of the galley fleet – all distributed evenly between 23 vessels.

Krotov calculates that the Swedes had no more than 92 guns bearing, and the Russians no less than 95 pieces on the 23 galleys that actually fought.

Tsar Peter was on the shore while Apraksin broke through the enemy sailing fleet; during the battle he observed the action from the half-galley in the rear of the van.

Apraksin demanded surrender, which Ehrenskold refused, and the attack began after the Admiral's flagship galley *Sv .Natalia* gave a cannon shot and hoisted an all-blue flag on fore rein, signalling the van's attack.

While both Russian wings started boarding and taking the Swedish flank galleys one after another, the centre at the same time attacked *Elefant* but boarded it after all the galleys fell. The defenders stood fast on their galleys and retreated to others towards the centre and eventually to the pram. Galley *Trana* was boarded first and sank with the weight of all the men on board. According to Russian participants, they only opened musket fire when pulled up to enemy vessels and the firefight was very hot: for example, 700 men of the Ingermanlandsky Regiment on the right flank fired 19,852 rounds or 28 per man. Some Russian soldiers when boarding were killed not by cannonballs but by the blasts of cannons, which meant they approached extremely close to the firing broadside. In the end *Elefant* was so badly crowded with crew and attackers that only a few men from the incoming galleys were able to board, and some fell into water; besides this, a fire started on the pram adding to the chaos on her deck. The popular Swedish version – about three successive attacks where only the third brought a result, and of progressive involvement of the whole Russian fleet – is not confirmed with reliable sources. It was the uninterrupted action of the 23 van galleys only; the core and rear had no room to participate and members of those divisions recorded that they only stood anchored while the van was fighting.

Despite the enemy's seemingly impregnable position with both flanks covered by islands, Peter sent a detachment around to look for a way into the Swedes' rear. One of the four, the galley of Captain Miyuschik and Lefortovsky captain Mozalevsky managed to find the way and attacked the Swedish line from the rear in the final stage of the battle.

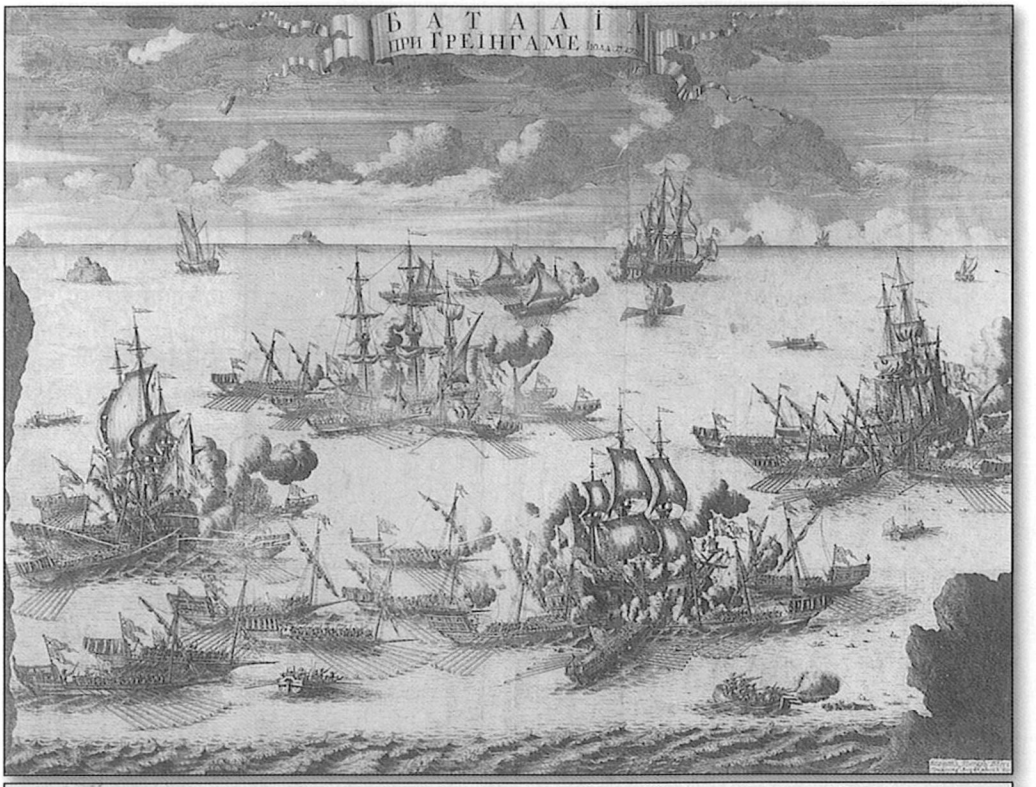
By the end of the fight, wounded Ehrenskold left *Elefant* and attempted to escape on a boat but was chased and taken by a boat with Captain Bakeyev and grenadiers of the Ingermanlandsky Regiment.

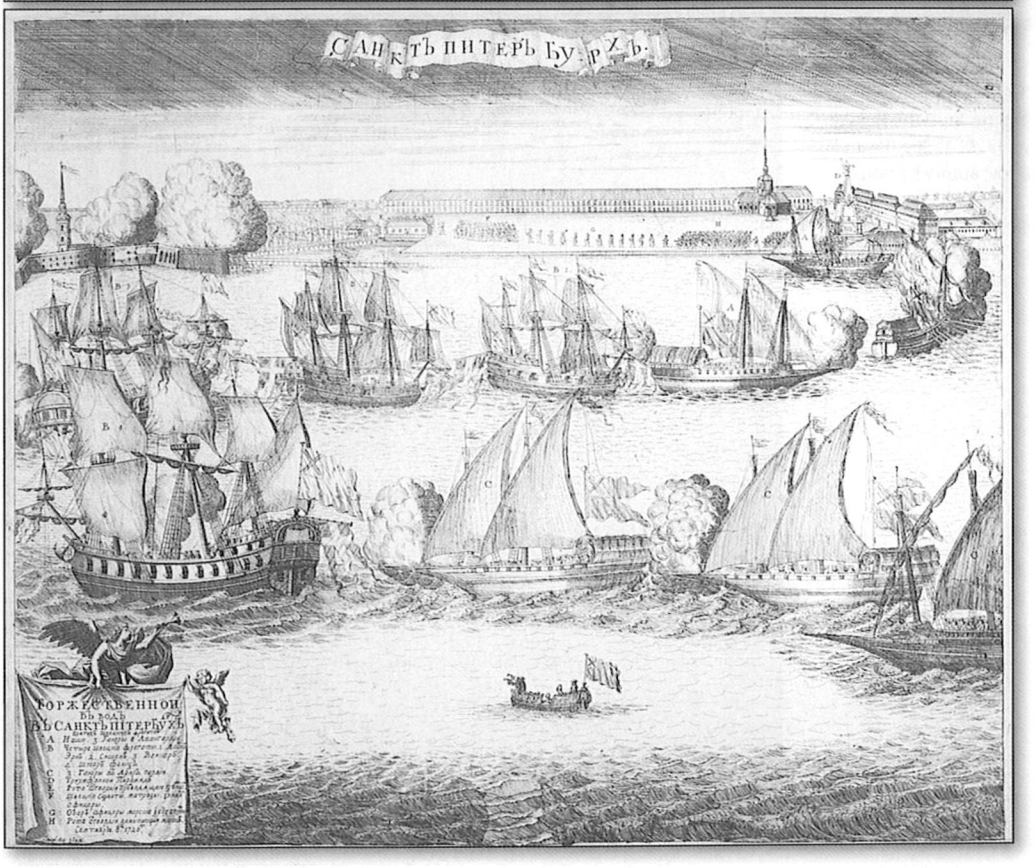
The battle lasted more than two hours. The Swedes lost 361 killed, others were taken prisoners and since many were taken wounded, about 200 of them died of wounds or disease over the following four months. The Russians

Opposite:

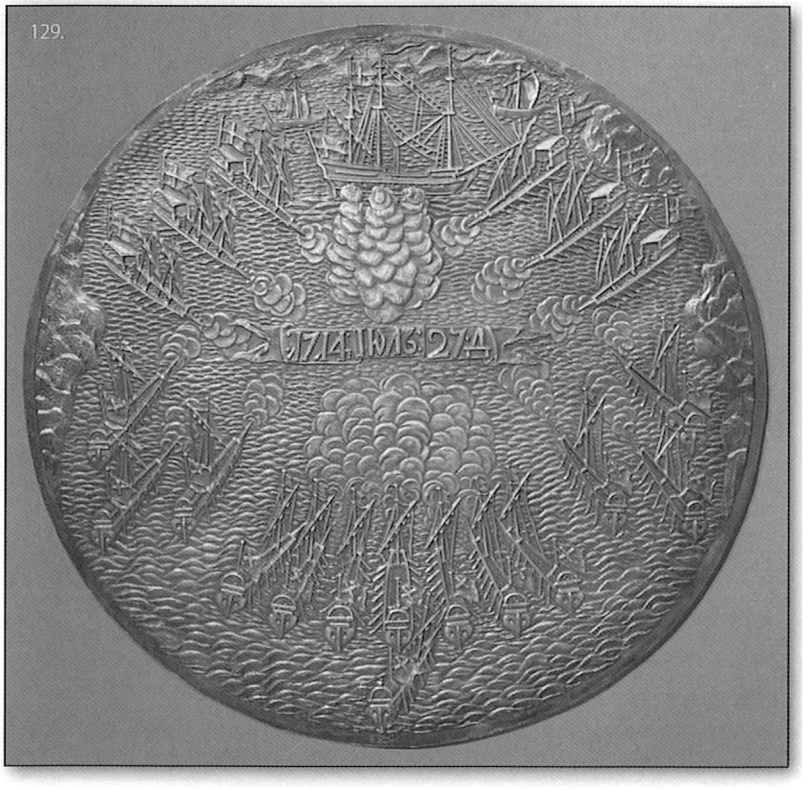
126 (top). The battle of Grengam (Gronhamn, Ledsund), 1720. Alexey Zubov (1683–1751))

127 (below). Ceremonial entrance of four Swedish trophy frigates to St. Petersburg after the victory of Grengam, 1720. (Alexey Zubov (1683–1751))


БАТАЛІЯ
ПРИ ГРЕНГАМЕ


САНКТЪ ПИТЕРЪ БУРХЪ

128. "Grengam has not saved four frigates from the Russian galleys, 1720". 1720s. (Rastrelli, Nartov; author's photo)



129. Battle of Gangut, July 27, 1714. 1720s. (Rastrelli, Nartov; author's photo)

lost 127 killed and 342 wounded. Despite only the galleys taking part in the fight and only defeating a minor part of enemy fleet, the battle is praised as Russia's great naval victory – it was the first affair of this scale, it was a success and it allowed to move on along the Finnish shores towards Åbo.

In 1719 Golitsyn's Corps in Finland had two 40-oar galleys, seven 38-, nine 36-, nine 32-oar horse galleys, one 28- and 82 30-oar galleys.

The last galley action in the war took place on the anniversary of Gangut, 7 August 1720, and is known as the battle of Grengam (after Gronhamn) in Russian historiography or Ledsund in Swedish.[124]

The Swedish squadron of 17 flags (including one ship, eight frigates, four galleys and other small craft according to captured Swedish officers) under Vice-Admiral Sjoblad chased a Russian galley squadron of 61 galleys and 29 boats with 10,714 infantry onboard. Russian commander Mikhail Golitsyn intentionally headed towards a narrow, shallow bay where the galleys had advantage. The Swedes in all-out pursuit opened fire and badly damaged one galley and finally fell into the trap. At a certain moment a detachment of Russian galleys (supposedly 20) crossed the Swedish line thus cutting off the four frontmost frigates. They found themselves in a shallow place where the deep-draught vessels had disadvantage in manoeuvres in between shoals.

Two Swedes ran aground and were boarded, the fight on them per Golitsyn was not excessively tough. The other two remained afloat but were attacked and boarded too. The melee was desperate on both sides. The Swedish artillery, doing its worst at close range, damaged more or less severely 42 galleys and kept firing even when boarding parties crawled upon the frigates. Among total 246 wounded Russians 43 were recorded as receiving burns when gunpowder exploded on the galley *Go*. The death toll was relatively moderate, 82. One of the frigates rammed *scampavia*, *Kharius*, damaging all 15 oars of her board. Nevertheless the galley did not sink and the crew – soldiers of the Troitsky Regiment – boarded the enemy ship and captured it. Russian infantry on the galleys had fired in total 31,596 cartridges with ball and 23,971 rounds of buckshot; no data on artillery expenditure is available. The Swedes lost 103 killed and 407 captured on captured frigates *Stora Phoenix* 34, *Vaincueur* 30, *Kiskin* 22, and *Danska Orn* 18, not counting casualties on the vessels that escaped. The Russian command was especially pleased with the outcome of the battle because the British squadron of Admiral Norris was present in the area to protect the Swedes, in vain as it turned out.

Swedish flagship *Pommern* 52 with the Vice-Admiral on board was attacked also, suffered heavily, lost her commander Commodore Pauline, and only escaped by a fine piece of seamanship using anchor at full speed to manoeuvre in a narrow pass. The Russians pursued until open water and came across planks shot off *Pommern*'s aft. Back in the early phase of the battle, during a chase on the open water under Swedish fire, the Russians lost one *scampavia*: *Vesfish* received six hits and sank near shore, and after the battle

124 The most up to date research by Pavel Krotov is not only based on both sides' published materials but also on Russian archive documents like after action casualty roster, list of damages of the galleys, interrogations of captured Swedish officers and the list of prisoners (P.A. Krotov, *Gangut – morskaia Poltava. 300 let pervoi pobede Rossiiskogo flota* (Moscow, 2014, pp. 99–124).

Russians unloaded and burnt her. The mention of her burning in Golitsyn's relation, together with a listing of 42 other galleys that suffered damage, led to an incorrect albeit popular conclusion that all 43 were burnt after the battle. The source does say that in the squadron's van 13 galleys had damage, in the centre 17, and in the rear 13; the damage varied from a shot through a sail to the breaking of oars. None of the listed damage was so heavy that the vessels had to be burnt, only 30-oar *Vesfish* was singled out in this respect.[125]

High Sea Actions

Battles between Swedish and Russian ships of the line were infrequent to say the least. Initially, the expertise and experience of the Russian sailors and commanders did not allow them to face the Swedes. The first occasions when Russian sailing ships really engaged an enemy at sea were in 1712 and 1713. Vice-Admiral Cruys demonstrated his cautiousness and indecisiveness in two actions which in the end costed him dear. In 1712, with four ships (*Pernov* 50, *Samson* 32, *Lizeta* 16, *Riga* 50) and 14 galleys and brigantines, he stopped the chase of a numerically inferior enemy (battleship, frigate and snow), and then failed to use advantage of his windward position to cut off the Swedes' retreat.

At Reval off Hogland on 22 July 1713 Cruys with his squadron chased three Swedes (*Osel* 56, *Estland* 48, *Verden* 54) under Commodore Karl Raab. In the firefight the Swedes claimed to have dismasted two Russians. After the Admiral's *Vyborg* 50 ran hard aground with *Riga* 50 and *Esperans* 44 doing the same, Cruys' remaining ships stopped the pursuit. 'The Swedes in this encounter, by keeping in a regular line and seconding each other, awed the Russians; and at parting made several shots after them by way of defiance.'[126]

The Tsar wanted his commanders to take more initiative and be more aggressive, which in most cases was not the case. This led to a number of court-martials, one of the most notorious held in January 1714 where Vice-Admiral Cruys was sentenced:

> For not having embraced the opportunity of taking or destroying the two Swedish ships and one snow in 1712, and when, in chase of three Swedish ships of war in 1713, his own ship struck on a rock, for not going on board another ship to hoist his flag and pursue the enemy; not giving the signal to the other commanding officers to board or pursue.[127]

The announced death penalty was mitigated by the Tsar and substituted with banishment to Kazan. Cruys' two subordinate captain-commodores were sentenced also: Scheltinga was reduced to a lower rank but soon restored; Rays was sentenced to be shot to death, but when brought in front of the musketeers the Tsar's pardon was read, and unlike the others this officer ended his life in perpetual exile in Siberia.

125 *MIRF*, T. 2, p. 510.
126 [J. Deane], *History of the Russian fleet*, p. 24.
127 *Ibid.*, p. 12.

Still, Peter admitted that his ships were not equal to the Swedish, and at the start of the 1714 campaign the military council stated that sailing fleet was only allowed to engage the enemy when the Russians had at least one third more ships of the same rank.

The *abordage* was one of the commonest methods of naval fighting, and before the 1714 campaign started appropriate preparations were made, per Deane: 'The Tsar ordered boarding bridges to be fixed with hinges to the gunwale of every ship, from the entering place to the forecastle reclining upon the booms; but in time of action, in case of boarding easily revolving upon the enemy's gunwale to facilitate the entrance of his men.' However, at the end of year 'the boarding bridges of such mighty expectation were quietly taken away, as it was impossible they should answer the design.'[128] Unlike galleys, sail ships never engaged in *abordage* during the war.

On 29 June 1714 yet another chase off Reval ended with nothing, this time with Rear-Admiral Mikhailov, viz. Tsar Peter, present in the squadron. When the six ship-strong Swedish squadron of Lillje stopped withdrawing in order to cover their rearmost ship, the Petrine captains did not attack. According to the always sceptical Deane, 'They knew not how to act; some that had shown great forwardness, upon the prospect of half a dozen engaging a single ship, now acted the quite reverse; not trimming their sails, making bad steerage, &c.'[129] The Russian campaign journal reads that the Swedes had the great advantage of knowledgeable pilots while the Russians did not know all the shoals and had to be cautious, one of them, *Arondel*, running aground slightly.

The year 1716 was marked with a significant event for Peter as Vice-Admiral. A gigantic combined fleet of Russian, Danish, British, and Dutch squadrons assembled at a rendezvous near Copenhagen for the planned landing of the Allies at Skone. The whole enterprise in the end was dismissed due to mutual suspicion among the Allies, but for the time being Tsar Peter was recognised by all as commander-in-chief. Albeit short and formal, it was a command over a very impressive naval force of 62 battleships with 3,616 guns.

The only considerable battle of sailing ships was near the island of Ösel (Saaremaa) in the Baltic Sea in 1719. Three Swedish ships under Commodore Wrangel were sent from Stockholm to protect commerce from the Russian cruisers. The Tsar, upon receiving intelligence about these ships, ordered that Captain Naum Akimovich Senyavin took ships from Reval to look for the Swedes. Senyavin's squadron comprised six ships and one snow. On June 4 1719 the two squadrons met in the open sea near Ösel; the Swedes retreated and the Russians pursued. The two foremost ships under Senyavin's command, *Portsmut* 52 and *Devonshir* 52, attacked Wrangel's *Wachtmeister* 52 but the latter, firing upon their rigging, managed to slow down the enemy and get away. Senyavin's *Portsmut* having lost two topsail yards together with *Devonshir* then attacked and captured the two smaller remaining Swedes – *Karlskrona Wapen* 34 and *Bernhardus* 12. At the same time Senyavin signalled to his other ships to keep chasing *Wachtmeister*. Captain John Delapp on

128 [J. Deane], *History of the Russian fleet*, pp. 28, 41.
129 *Ibid.*, p. 33.

Yagudiil 52 and Captain Shappuzean on *Rafail* 52 came from both sides close to Wrangel who again attempted to fire at their rigging. Delapp worked out a stratagem: he advanced as near as possible and told his officers and men to be ready at their cannons but then gave loud commands in Russian and in English as if he was preparing for *abordage*. Commodore Wrangel hearing those commands called out all of his men onto the upper deck to repulse the attack in a hand-to-hand fight. Now that the deck of *Wachtmeister* was crowded with crewmen, Delapp pushed away a little and gave a board volley with every cannon loaded with ball and grapeshot, and at once killed 85 men. Wrangel gave up and was just about to order down his flag and raise a white flag when a third ship, *Uriil* 52 arrived, and not knowing the fight was over gave another volley that killed 47 more Swedes and wounded the Commodore.[130] All three prizes were brought to Reval and this became the first and the only victory of the Russian deep sea fleet in the Great Northern War. Naum Senyavin was promoted to Captain-Commodore, other captains decorated with gold medals on a chain and the men given money.

Cruising – the naval small war – was far more common. Russia's foreign sea trade suffered considerably from Swedish privateers in the Baltic and from French in the North Sea who intercepted English and Dutch vessels with goods from or to Russia.[131] Britain provided her own armed ships to escort merchants and it was only in the second half of the war that the Russians were able to counter enemy privateers and start privateering on their own. The first prizes were taken in 1710 when two frigates *Prorok Ilya* and *Sv.Pyotr* on their way from Arkhangelsk captured two Swedish galiots, thus for the first time representing the Russian flag in the Kattegat area. Remaining in Copenhagen, the next year they took an 11-gun privateer and a few armed merchantmen.[132]

In 1712 the Tsar sent a detachment of three Russian and two Danish frigates under Captain Rays to search and take any vessels with provisions necessary for the army in Pomerania. Five Dutch vessels were thus deprived of their load, which was to be compensated to owners from the stores of Russian grain in Amsterdam.[133]

The 1715 campaign started with the success of Captain Bredal, who on the frigate *Samson* from Reval searched Swedish privateers. On 22 April near Vindava on the Courland shore he attacked and after a hot firefight captured *Enhorning* 18; her Captain 'Aveman' in the Russian relation was named as one of Sweden's prominent privateers. The next day Bredal chased and took without a fight *Esperance* 11, and on the 27th *Stockholm Gallej* 10. The first, leaking after the fight, was burnt and two other prizes were brought to Reval.[134]

130 Russian version with casualty figures given after Fedor Soymonov, contemporary navy officer; his account together with interrogation of Wrangel was published by Pavel Krotov in *Morskoi sbornik*, 12, 1990.

131 J. Hartley, 'War and the Merchants: The Great Northern War (1700–21)' in *Eighteenth-Century Russia: Society, Culture, Economy. Papers from the VII International Conference of the Study Group on Eighteenth-Century Russia*, (Wittenberg, 2004), pp. 486–488.

132 F.F. Veselago, *Ocherk russkoi morskoi istorii*, Part 1, (SPb, 1875), pp. 203, 211.

133 *Ibid.*, p. 218.

134 MIRF, T. 1, pp. 610–611.

On 11 August 1717 the cruising detachment of Captain-Commodore Van Hofft of *Perl* 50, *Portsmut* 52 and *Prince Aleksandr* 24 near Åland captured the snow *Pollux* with 14 guns, 10 swivels and 66 men. Van Hofft received 500 rubles, officers and men – three months pay.[135] Overall Van Hofft, who commanded cruisers in the eastern part of the Baltic in 1717–1718, took 15 prizes.

Another Petrine cruiser, Captain Villebois, operated out of Gdansk and in 1717–1719 disrupted Sweden's overseas supplies by taking many prizes.[136]

In 1718 on *Samson*, Captain John Deane – future author of the 'History of Russian Fleet under Peter the Great' – took eight prizes. Two were captured in the harbuor in Gotland under the very Swedish guns by 'amusing the people on the batteries with the Swedes' colours and friendly discourse.' Later in the campaign a Swedish privateer was chased by *Samson* into a narrow creek, inaccessible to the frigate, where the privateer's crew brought four guns ashore to defend their vessel, but as *Samson* came near enough to suppress their battery, they set their ship on fire and retreated; the Russians landed and took their guns, ammunition, and whatever else they could preserve from the flames.[137]

135 F.F. Veselago, *Ocherk russkoi morskoi istorii*, Part 1, (SPb, 1875), pp. 300–301.
136 *Ibid.*, p. 301.
137 [J. Deane], *History of the Russian fleet*, pp. 58, 59.

Conclusion

The westernisation of the Russian military did not start with Peter; his father and grandfather both introduced Western models in the army and hired foreign officers. However, the inflow of West European professionals, knowledge, and materiel indeed had increased dramatically in Peter's reign. Western styles of costume were adopted in the 1700s, and ideas dominated too. However, foreigners never gained roles high enough to fully control operations even when they were formally in charge.

The complicated structure of the pre-Petrine society changed. Numerous categories of the old services were abolished; farming peasantry became the main source for the manpower and now bore the most burden, and even the nobility now had to serve permanently. The reforms were sometimes impulsive and often met setbacks, yet they moved the country to the new economy and new culture.

It is still subject to discussion whether it was worth it to break so radically with the old Russian traditions, and whether it was necessary to get rid of such superficial attributes as oriental costume and beards. Could *streltsy*, cossacks, or feudal horse have won over the Caroleans? Were native warlords skilled in modern warfare? The fact remains: the Russian military force underwent tremendous modernisation and came victorious out of the war that lasted 21 years.

In terms of strategic command, Peter tended to not to hazard and seeked to gain sure success by concentration of forces, by not allowing the enemy to use their advantages. At the same time he was willing to take reasonable risk when it came to urgent moves; more than once he opened a campaign earlier than the Swedes and thus gained.

The high command – Petrine field marshals and generals – as a rule were not very proactive, and besides this sometimes their quarrels hindered successful actions. Nevertheless with their cautious approach they managed to gain results. If at the beginning of the war they only dared to field in numerical superiority, later they were not afraid of fighting on a par. There were few talented generals – Mikhail Golitsyn first of all – capable of waging daring and bold operations.

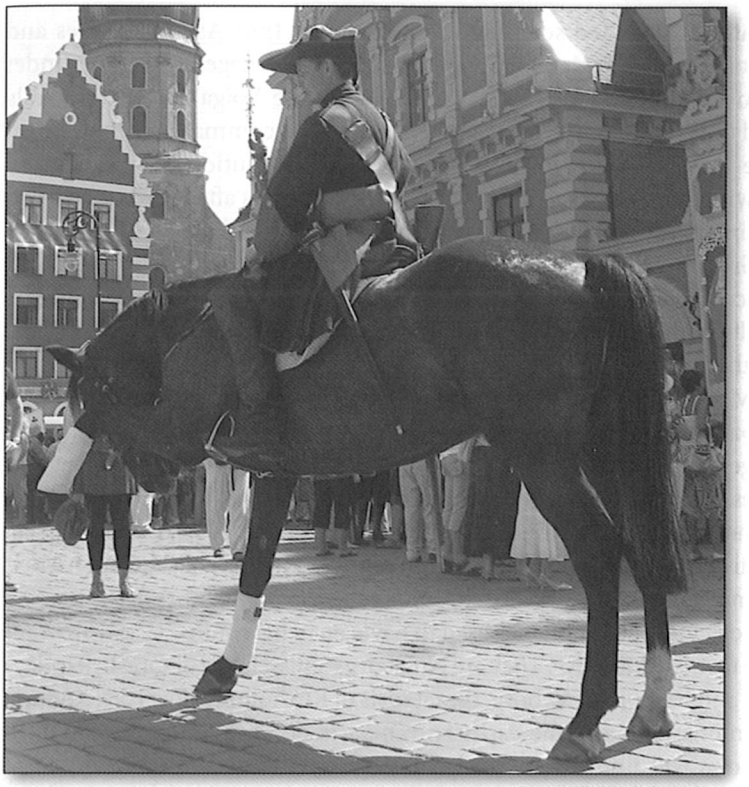
The new regular infantry became the backbone of the army. They were actively employed in siege operations, many took part in naval actions, and some rode horses. However their chances to encounter the enemy in a field battle were relatively low if we look at the 21 years of the war. Field tactics developed to cope with the Swedes relying on the firepower of musketeers

130. Fusiliers of the Preobrazhensky Life Guard Regiment, 1700–1720. The list of what is wrong with these pictures includes: a) too broad a period, because uniforms changed to the Western style in late 1702, and there were minor changes afterwards; b) the snaphaunce musket is too archaic a model, as they used modern fusils; c) neck cloth with a bow and loose ends, and d) scalloped pocket flaps of the coat – unheard of in the sources; e) stockings worn under trousers which is against period fashion; f) cloak too short with unnecessary cape below collar. (From V.A. Viskovatov, ***Istoricheskoe opisanie odezhdy i vooruzheniia rossiiskikh voisk*** [Historical description of cloths and armament of Russian troops], T. 2 (1700–1725) (SPb, 1899))

and regimental guns. The bayonet charge after the close range volley was probably modelled after the Swedes, but was implemented on very few occasions. In sieges, the stubborness of the Russian foot in defence was coupled with their willingness to storm notwithstanding casualties in attack.

Cavalry, or dragoons to be precise, had far more connection to the old forces for their personel largerly were noble landowners, like in pre-Petrine horse. Although it is generally accepted that the Russian cavalry was far less efficient compared to the enemy horse, their overall experience of fighting their foe in the open was probably more extensive than that of the infantry. In their tactics dragoons heavily relied on fire from horse followed by a charge sword in hand; despite this approach being considered inferior to the impetuous charges of Carolean cavalry, it brough results even against them.

The artillery was raised from the ashes after 1700; the industry managed to provide the field army with bronze pieces and fortresses and the navy with cast iron guns, continuously improving and lightening the design of guns and carriages. Ordnance was instrumental in siege warfare, where they practiced bombardment with both large and hand mortars, besides breaching guns. In the open Peter wanted to bring to bear as many regimental and field cannons as possible, although in reality this happened only on few occasions.



131. Great Northern War reenactors in historical places of Arensburg (Kuressaare today; previous page, top), Noteburg (Schlisselburg; previous page, bottom); and Riga (left). Reenactment group "Preobrazhensky Life Guard Regiment, 1709". (Author's and reenactors' collections)

The number of siege operations of varying scope appeared to be at least comparable if not in excess of the quantity of land battles, clashes, and skirmishes, and far exceeded sea fights. One may assert that until 1713 an average foot soldier was more likely to participate in a siege or an assault or defence of a fortified place rather than to meet the enemy in the open. In the 1710s pitched battles were still rare, and naval campaigns became predominant for the army in Finland.

In the war's first lake actions, having only smaller unarmed rowing boats, the Russians employed inshore swarm tactics that minimised the superiority of the Swedish larger vessels and helped to gain several local successes. On a larger scale this approach was repeated in 1712–1721 when the galley fleet managed to perform strategic operations in Finland and Sweden without being intercepted by the Swedish sailing ships. The actions of this inshore fleet also proved daring and skillful and brought results.

The sailing fleet developed from literally nothing to a considerable force that changed the balance of power in the Baltic by its sheer existence. Its battle effectiveness was hardly tested during the war. The enormous efforts spent on its creation and uncertainty in the qualification of personel, albeit fully reasonable, led to the adoption of the doctrine of not engaging without numerical superiority. Despite the Tsar desiring his officers to have more initiative, in fact they were discouraged to act daringly which subsequently became a long-lasting problem of the Russian Baltic fleet.

The irregulars remained integral part of the Tsarist forces, and were best suited for the small war. Development of the empire tended to centralisation

which naturally affected semi-autonomous hosts; thus Asiatic peoples and Cossacks in various regions gradually lost their privileges and came under more control. This led to a series of revolts on the Volga and in the Urals, Don, and the Ukraine, which demanded troops and commanders to be taken from the main theatre. However limited the contribution of irregulars to the war with Sweden in reality, in Europe for centuries afterwards a bearded Cossack in a furry cap became symbol of all Russian military.

The Great Northern War has left a considerable heritage, and one can visit many places mentioned in this book. First of all is St. Petersburg – a city founded in 1703. Its period buildings worth visiting are the six-bastion Peter-and-Paul fortress, the wooden log house of Tsar Peter, his Winter and Summer Palaces, and the Menshikov Palace. The suburbs boast the splendid palaces of Peterhof, Oranienbaum, and Strelna, with their period interiors and collections. The State Hermitage Museum has a collection of Peter's wardrobe and other belongings, and pieces of art and craft as well as a selection of flags. The Museum of Artillery exhibits not only period cannons but small arms and cold steel, both Russian and Swedish trophies. The Naval Museum represents a vast collection of models of ships and galleys, authentic flags, weapons and the 'grandfather of the Russian navy': an original boat Tsar Peter used to navigate in his youth.

Many fortresses survive. They are Noteburg (Shlisselburg or Oreshek today), the castle and bastions of Vyborg, the citadels of Kexholm (Priozersk), Koporie, Pechory monastery, and the earthern ramparts of Yamburg (Kingisepp). In Moscow one will find Great Northern War-related exhibitions in the State Historical Museum and many places – the Kremlin to name the principal – that can give an idea of what pre-Petrine Russia looked like.

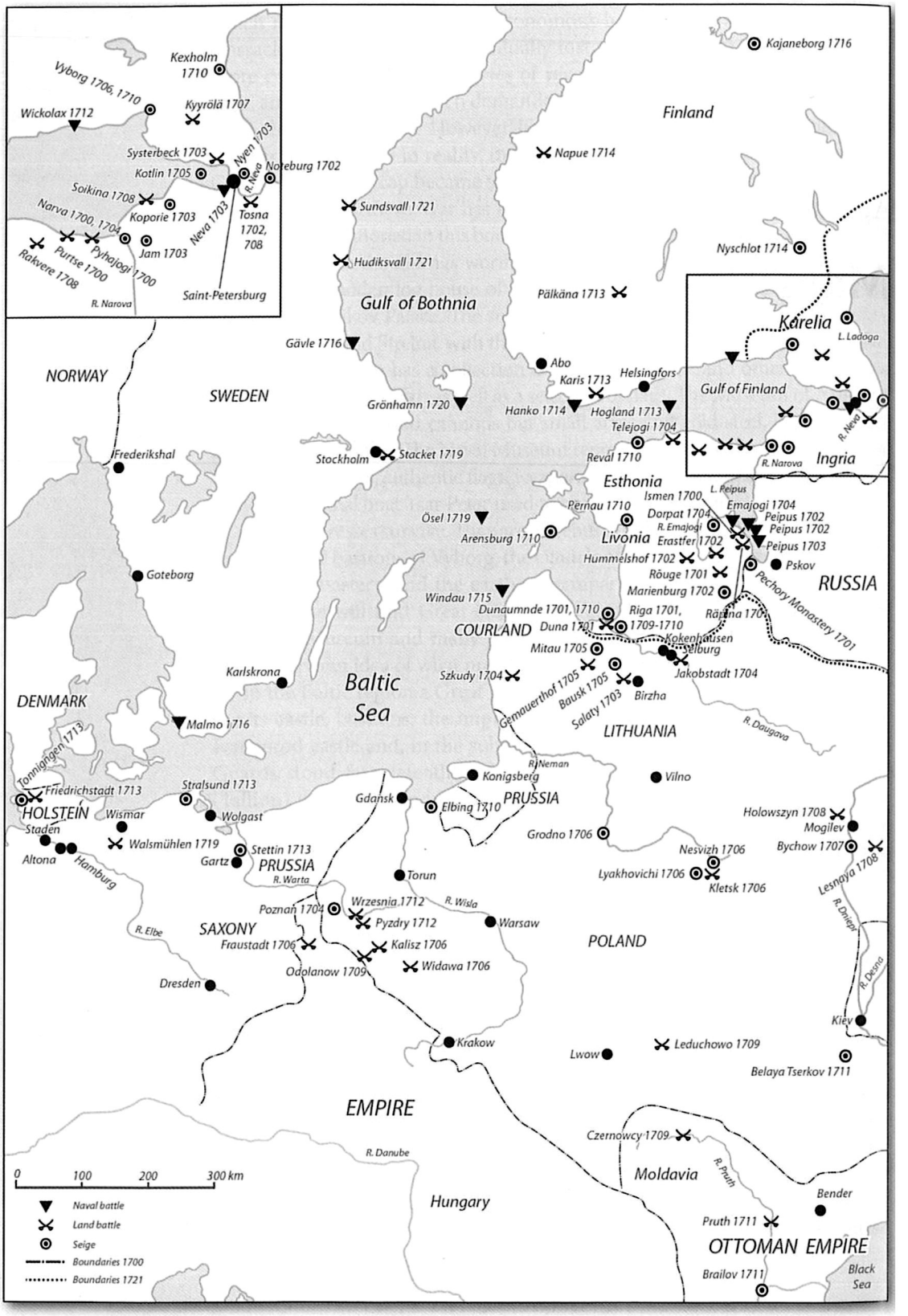
In the Baltic region a Great Northern War enthusiast must visit Narva to see its castle, bastions, the impressive view across the river on the Russian Ivangorod castle and, in the suburb, the monument on the place where the Guards stood fast defending the bridge in 1700. The old towns of Reval (Tallinn) in Estonia, and Riga in Latvia, were also witnesses to the events of the period as well as fortress Dunamunde (Daugavgriva) and minor castles such as Rakvere, Kuressaare and others. Finland's Great Northern War locations are Castle Nyslott (Olavinlinna), the ruins of Kajenborg (Kajaani), the battlefields of Pälkäna and Napue, and the museum of Jakobstadt with maritime archeology finds from the Russian vessels sunk in 1714.

Poltava in Ukraine of course has the battlefield museum and a few redoubts recreated on the field; the new version of Hetman Mazepa's citadel was recently built from scratch in Baturin. Great Northern War sites in Belarus include the battlefield of Lesnaya, which is marked with a monument, the field of Holowczyn, and the castles of Mir, Nesvizh, and Bychow. In Sweden, besides Stockholm's Army Museum (Armémuseum) and Livrustkammaren that hold splendid collections of Swedish and Russian trophy artefacts, one may visit HAMN museum built on the spot of the battle of Stacket – perhaps the only Great Northern War battlefield that has undergone systematic archeological study. There are many more places across Europe where the Russians were or were not present during the war, of course, and if they are omitted in this book it is the author's fault.

Appendix I

Maps

THE RUSSIAN ARMY IN THE GREAT NORTHERN WAR 1700 –1721



N
White Sea
White Sea
Novodvinskaya 1701
Arkhangelsk
R. North Dvina
L. Onego
Kargopol
L. Ladoga
R. Svir
Olonets
Noteburg 1702
Ladoga 1702
Ladoga 1702
Lava 1701
Tosna 1702, 1708
R. Volkhov
Novgorod
Vologda
RUSSIA
R. Volga
Tver
Vladimir
Nizhny Novgorod
Kazan
Moscow
Zainsk 1707
Ufa
R. Dnepr
Smolensk
Raevka 1708
Dobroye 1708
Lesnaya 1708
Tula
Mglin 1708
R. Desna
Lipetsk
Mezin 1708
Voronezh
Baturin 1708
Hetmanate
Kharkov
R. Don
R. Dnepr
R. Vorskla
Izyum
Tsaritsyn 1708
Novobogoroditsk
Kodak
R. Volga
Zaporozhian Sich 1709
Chala 1711
Troitsk 1711
Cherkassk 1708
Kazikermen 1695
Azov 1695, 1696, 1708
CRIMEA
Sea of Azov
Astrakhan 1706
Caspian Sea
Ternov 1708
Sumy
Nedrihailov 1708
Veprik 1709
Oleshnya 1709
Rashevka 1709
Krasny Kout 1709
Sorochintsy 1709
R. Vorskla
Kharkov
Poltava 1709
Poltava 1709
R. Dnepr
Starye Senzhary 1709
Chigirin
Sokolka 1709
Perevolochna 1709
Novosergievsk 1711
0
100
200
300 km
Naval battle
Land battle
Seige
Boundaries 1700
Boundaries 1721

Appendix II

Timeline

The military actions during the years 1700–1721 for the Petrine forces were mainly a struggle against Sweden. At the same time there many cases when they fought other adversaries – Turks, Tartars, Poles, Lithuanians and rebels like Cossacks, *Streltsy*, Bashkirs etc. Gathering all the actions in one timeline should provide a descriptive overview of the epic efforts spread in time and across geography.

For the sake of keeping the size of this publication reasonable, we list only actions where Russian troops participated either as an independent side (by default) or as part of Allied force (composition is indicated then). Unless noted otherwise, all actions are between Russians and Swedes. Events are grouped into battles, viz. land clashes of varying significance, Naval battles, viz. sea, lake and riverine actions and sieges that engulf any attacks on fortified places. For the same sake, every event is described with as few as three parameters: date, region and outcome. Dates are in new style; sieges show the period between investment and end of operation (surrender of a place or the raising of the siege). The outcome of a battle is described as the win or loss of the Russian side; the dichotomy of win or loss at times is rather simplistic and win stands for both triumph and moderate success. Result of a siege is described in more details that indicate who was the besieger and the besieged.

Abbreviations used for the regions:
B = Baltic Sea, C = Courland, D = River Don basin, E = Estonia/Estland, F = Finland, H = Holstein, I = Ingria/Ingermanland, K = Karelia, Lt = Lithuania, Lv = Livonia/Livland, M = Mecklenburg, Md = Moldavia and Wallachia, N = Novgorod area, NC = North Caucasus, P = Poland, Pm = Pomerania, Ps = Pskov area, S = Sweden, Sm = Smolensk area; U = Ukraine, Ur = Urals, V = River Volga basin, W = White Sea.

1700

Battles on Ismen (6 Nov; Lv; loss), **Purts** (9 Nov; E; win), **Pyhajogi** (27 Nov; E; loss), **Narva** (30 Nov; I; loss)

Siege of Narva (23 Sept–30 Nov; I; Russ. siege lifted by Sw.)

1701

Sieges of Lava (28 Jan–8 Feb; N; place taken by Sw.), **Petchory** (12 Feb; Ps; Sw. assault repelled), **Riga** (19 Jul; Lv; Sax.-Russ. siege lifted by Sw.), **Dunamunde** (22 Jul–2 Jan 1702; Lv; place taken by Sw. from Sax.-Russ.)
Battles of Duna (19 Jul; Lv; Sw. win over Sax.-Russ.), **Räpina** (15 Sep; Lv; win); **Rõuge** (15 Sep; Lv; loss)
Naval battle by Novodvinskaya fortress (6 Jul; W; Sw. naval attack repelled)

1702

Sieges of Marienburg (25 Aug–5 Sep; Lv; place taken from Sw.), **Noteburg** (7–23 Oct; I; place taken from Sw.)
Battles of Erastfer (9 Jan; Lv; win), **Hummelshof** (29 Jul; Lv; win), **Tosna** (21 Aug; I; win)
Naval battles: Lake Peipus (9 Jun and 22 Jul; Lv; win), **Lake Ladoga** (8 Jul and 8 Sep; K; win)

1703

Sieges of Nyenskanz (6–12 May; I; place taken from Sw.), **Koporie** (3–7 Jun; I; place taken from Sw.), **Jama** (19–25 May; I; place taken from Sw.)
Battles of Salaty (29 Mar; Lt; Russ.-Lit. loss to Sw.-Lit.), **Systerbeck** (18 Jul; K; win)
Naval battles: River Neva (18 May; I; win), **Lake Peipus** (9 Jul; Lv; loss)

1704

Sieges of Dorpat (20 Jun–24 Jul; Lv; place taken from Sw.), **Narva** (10 Jun–20 Aug; I; place taken from Sw.), **Pozen** (14 Oct; P; Sax.-Russ.sieged lifted)
Battles of Jakobstadt (6 Aug; Lt; Lit.-Russ. loss to Sw.-Lit.), **Telejogi** (26 Jun; E; win), **Szkudy** (12 Nov; Lt; Lit.-Russ. win over Sw.-Lit.)
Naval battle: Kastre on River Emajogi (14 May; Lv; win)

1705

Sieges of Mitau (25 Aug–16 Sep; C; place taken from Sw.); **Bausk** (6–24 Sep; C; place taken from Sw.)
Battle of Gemauerthof (29 Jul; C; loss)
Naval battle for Kotlin island (16 Jun, 26 Jul; B; Sw. assaults repelled)

1706

Battles of Fraustadt (13 Feb; P; Sax.-Russ. loss to Sw.), **Kletsk** (30 Apr; Lt; loss), **Widawa** (14 Oct; P; win), **Kalisz** (29 Oct; P; win)
Sieges of Grodno (26 Jan–10 Apr; Lt; place evacuated after Sw. blockade), **Lyakhovichi** (6 Apr–20 May; Lt; place taken from Ukr. by Sw.), **Astrakhan** (23–24 Mar; V; place taken from rebel *streltsy*), **Vyborg** (23 Oct–2 Nov; K; Russ. siege lifted)

1707

Battle of Kyyrölä (3 Aug; K; win)
Sieges of Bychow (19 May–25 Jun; Lt; place taken from Lit.), **Zainsk** (Dec; Ur; place taken by rebel Bashkirs)

1708

Battles of Grodno (2 Feb; Lt; loss), **Wohlfehrt** (17 May; Lv; win), **Holowczyn** (14 Jul; Lt; loss), **Dobroye** (10 Sep; Lt; win), **Raevka** (19 Sep; Sm; win), **Lesnaya** (9 Oct; Lt; win), **Mezin** (11 Nov; U; loss), **Rakvere** (26 Aug; E; win), **Tosna** (9 Sep; I; loss), **Koporie** (8 Oct; I; loss), **Soikina** (25 Oct; I; win)

Sieges of Cherkassk (9–12 May; D; place taken by rebel Don Cossacks), **Tsaritsyn** (May; V; place taken by rebel Don Cossacks; July; retaken by government troops), **Azov** (17 Jul; D; assault of rebel Don Cossacks repelled), **Baturin** (5–13 Nov; U; place taken from rebel Ukr. Cossacks), **Ternov** (20 Dec; U; place taken from Ukr. by Sw.)

1709

Battles of Krasny Kout (11 Feb; U; loss), **Rashevka** (26 Feb; U; win), **Sokolka** (23 Apr; U; win), **Leduchowo** (24 May; P; win over Lit.-Pol.), **Poltava** (8 Jul; U; win), **Czernowcy** (4 Oct; U; win over Sw.-Ukr.), **Odolanow** (21 Oct; P; loss to Pol.)

Sieges of Veprik (16–17 Jan; U; place taken by Sw.), **Oleshnya** (21 Feb; U; place taken from Ukr. by Sw.), **Perevolochna** (29 Apr; U; place taken from rebel Ukr. Cossacks), **Sich** (22 May; U; place taken from rebel Ukr. Cossacks), **Poltava** (11 May–8 Jul; U; Sw. siege lifted), **Senzhary** (25 June; U; place taken from Sw.)

1710

Sieges of Riga (7 Nov 1709–15 Jul 1710; Lv; place taken from Sw.), **Elbing** (11 Mar; P; place taken from Sw.), **Vyborg** (1 Apr–24 Jun; K; place taken from Sw.), **Pernau** (3 Jul–26 Aug; E; place taken from Sw.), **Kexholm** (19 Jul–19 Sep; K; place taken from Sw.), **Reval** (26 Aug–10 Oct; E; place taken from Sw.), **Arensburg** (19–23 Sep; E; place taken from Sw.), **Dunamunde** (18 Jul–12 Aug; Lv; place taken from Sw.)

1711

Battles of Pruth (19–20 Jul; Md; Turk. win), **Chala River** (17 Sep; NC; win over Tart. and rebel Don Cossacks)

Sieges of Belaya Tserkov (5–6 Apr; U; Turk.-Tart.-Pol.-Ukr. assault repelled), **Novosergievsk** (22–23 Apr; U; place taken from rebel Ukr. Cossacks), **Troitsk** (2 Aug; D; Turk. assault repelled), **Brailov** (23–24 Jul; Md; place taken from Turk.)

1712

Battles of Pyzdry (12 Jun; P; loss to Pol.), **Wrzesnia** (26 Jun; P; win over Pol., Tart., Ukr.)

Naval battle of Wickolax (31 Aug; B; win)

1713

Battles of Friedrichstadt (11 Feb; H; win), **Karis** (2 Sep; F; win), **Pälkäna** (17 Oct; F; win)

Sieges of Tonningen (12 Mar–20 May; H; place taken from Sw. by Russ.-Dan.-Sax.), **Stettin** (19 Jul–30 Sep; Pm; place taken from Sw. by Russ.-

Sax.), **Stralsund** (17 Jul– ; Pm; Russ.-Sax. siege lifted)
Naval battle of Hogland (22 Jul; B; Sw. success)

1714
Battle of Napue (2 Mar; F; win)
Siege of Nyschlot (30 Jun–9 Aug; F; place taken from Sw.)
Naval battle of Hanko (8 Jul; F; win)

1715
Battle near Astrakhan (16 Feb; V; raid of Tart. and rebel Don Cossack repelled)
Naval battle of Windau (5 May; B; 3 Sw. cruisers captured)

1716
Siege of Kajaneborg (30 Jan–7 Mar; F; place taken from Sw.)
Naval combats: off Malmo (10 Sep; S; exchange of fire with Sw. coast batteries), **Gävle** (Aug; S; Russ. evaded Sw. attack)

1717
Expedition to Xiva (Jun–Aug; Central Asia; loss to Xiva Khanate)
Naval combat off Åland Isles (11 Aug; B; win)

1718
Naval combat at Hanko (14 Jun; F; recapture of 10 Russ. cargo vessels from Sw. cruiser)

1719
Battles of Walsmühlen (5 Mar; M; Mecklenb.-Russ. win over Hannover) and **Stacket** (24 Aug; S; win)
Naval battle of Ösel (4 Jun; B; win)

1720
Naval battle of Grönhamn (7 Aug; B; win)

1721
Battles at Hudiksvall (2 Jun; S; win), **Sundsvall** (5 Jun; S; win)

Appendix III

Regimental Uniform Colours

As units of the army wore a variety of colours in the course of the war, it is hard to tell what colours were worn by certain regiments in a particular year. Until recently one could only find this information in the Appendix to Viskovatov. The data was rather fragmentary and mainly covered the period starting 1711. The most comprehensive information about Russian uniforms, weapons and equipment available nowadays, albeit not exhaustive due to limitations of sources, was published in 2008 in a book by archivists from Moscow, written by Kirill Tatarnikov and edited by Vadim Egorov. They worked through surviving regimental chancelleries stored in the Russian State Military-Historical Archive (RGVIA) and in the Russian State Archive of Ancient Acts (RGADA). The Military Collegium requested in 1720–1721 that all infantry, dragoon and grenadier (Guards excluded) regiments submitted information about personnel and materiel starting from the year when the unit was raised. Regiments fulfilled the task, however in many cases, especially in infantry, regimental records were not available for the years prior to 1711. In that year the main army lost its trains, including regimental chancelleries, in the unlucky campaign on the Pruth River. Some lost their papers later due to naval catastrophes, through the desertion of clerks or in fires. Even when certain items were listed in records, they were not necessarily described in terms of colour – they are just 'coats' and 'stockings'. Notwithstanding, the surviving materials provide an astonishing amount of information about weapons, equipment and uniforms issued to regiments in one year or another. Thus Tatarnikov's volume was the major but not the only source for the details below.

Sergey Karpuschenko from the Artillery Museum was the first who researched archive to bring up details of the artillery uniforms. A series of articles by Vadim Egorov, based on archive sources, clarified data on uniforms of the Ingermanlandsky Infantry (in the 2000s it was believed that the regiment had yellow-red coats in 1706; Egorov proved that this was Menshikov's intention but it was never executed) and several elite dragoon units. Guard uniforms were first described, basing on published sources, by Sergey Letin. A few pieces of colour information that were omitted by modern scholars can be still obtained in first hand documents published in the late 19th and early

20th centuries.[1] Flag colours of the pre-1712 period have long been a mystery despite there being a good many surviving pieces – none of them, except those belonging to Guards, have a proven connection to particular regiments. One finds only a few pairs of 'regiment-flag colour' for 1701 and 1705.[2]

Colours of Russian regimental uniforms were also described in English in the 2nd volume of the book 'The Great Northern War 1700–1721. Colours and Uniforms'.[3] The majority of the specific data were taken from Viskovatov but the most valuable were eyewitness accounts of Swedish spies who observed Russian troops in Ingria in 1708[4] and in Finland in 1717.[5] Their data is sketchy but still very useful. Having checked primary publications used by authors, we were able to verify and refine some data; for example, the cockades of Ingermanlandsky hats were not pink but were rather 'paper rosettes'. Accounts of other foreign observers from Denmark, the Netherlands, Poland, or Sweden also provide some colour details.

All positive data that could be collected about uniforms colours from the above mentioned literature and sources were put together in this Appendix. Clothing and flags are listed when we know their colour. The type of headwear is relevant to recreating the impression, so even if colour is not mentioned, it is still helpful to know that a certain unit had *karpus* and not hat or vice versa. Since it was not an absolute rule that grenadier companies had grenadier caps, any mention of these caps is recorded even if there is no colour data. In most cases the records reflect the factual existence of items that either were already in place that year or were issued sometime during the year. On a few occasions, we only know of an intention to issue a certain colour to a certain regiment and it is indicated so, for we cannot be sure if it was carried out in the end.

This information is not meant to mention all regiments that existed in Peter's army, it merely lists those regiments that have at least some uniform data.

Units are listed under their post-1706 (dragoons) and post-1708 (infantry) geographical names. The headings include both adjective name (e.g. Moskovsky) and name of a place (Moscow) for those who would not want to mess with *-skiis*. Pre-1706/8 colonels' names are mentioned, too, as well as the year when the unit was raised.

1 *Severnaia voina. Dokumenty 1705–1708; Zeziulinskii, N., K rodosloviiu 34-kh pekhotnykh polkov Petra I* [About the lineage of 34 infantry regiments of Peter I] (Petrograd, 1915).

2 *Severnaia voina. Dokumenty 1705–1708*; V.S. Velikanov, 'K voprosu o sostoianii russkoi armii posle narvskogo porazheniia' [About the state of the Russian army after defeat at Narva]. Proceedings of the *Voina i oruzhie. Novye issledovaniia i materialy. Trudy sedmoi Mezhdunarodnoi nauchno-prakticheskoi konferentsii 18–20 maia 2016 goda* [War and Weapons. New studies and materials. Works of the 7th international conference, Artillery Museum, 18–20 May 2016], (SPb: VIMAIViVS, 2016), Vol. 2, p. 39.

3 L.-E. Hoglund, A. Salnas, A. Bespalov, *The Great Northern War 1700–1721. Vol. II. Sweden's Allies and Enemies. Colors and Uniforms* (Karlstad, 2006).

4 F. Hjelmqvist, *Kriget i Finland och Ingermanland 1707 och 1708* (1909)

5 Yrjö Koskinen, *Lähteitä ison vihan historiaan: Handlingar till upplysande af Finlands öden under det Stora nordiska Kriget*, T. 1, (Helsingfors, 1865), pp. 445–446.

Guards

Preobrazhensky Life Guard Regiment

Originated in 1683, formally established as a regiment in 1690, named Life Guards in 1700.

1700: Hungarian coat dark green, boots red. 1701, March: coat green lined with fur, cap red trimmed with sable fur. 1702, December: French coat dark green with red facings, buttons covered with uniform cloth, hat with broad brims trimmed with white lace, grenadier caps of bearskin. 1703: French coat dark green, cuffs, waistcoat and trousers red, German hat trimmed with lace; German bombardier caps with big black trimming. 1704: coat green with red cuffs and brass buttons. 1706: 'hats trimmed with cloth from rotten coats'; 'hats made well but have four corners, should be three'. 1707: grenadier cap with bearskin or beaver trimming and red cloth top. 1708: coat single-breasted. 1711: collar red. 1712: grenadier caps leather with pewter plates. 1720: coat dark green, cuffs and collar red, cloak dark green; officer coat all dark green with cuffs and collar, trimmed with gold lace.

Semenovsky Life Guard Regiment

Originated in 1688, formally established as a regiment in 1690, named Life Guards in 1700.

1702, December: French coat dark blue or azure with red facings, buttons covered with uniform cloth. 1703: French coat light blue, cuffs, waistcoat and trousers red. 1704: coat blue, hat trimmed white. 1707: grenadier caps arrive from Preobrazhensky regiment. 1709: buttons brass, 26 per coat, neckcloth white. 1711: collar red. 1720: coat dark green, cuffs red, collar blue, cloak blue; officer coat all dark green with cuffs and collar, trimmed with gold lace.

Grenadiers

Weide's Grenadiers (1st Grenadiers)

Raised in 1708. Colonels: Yury Bush 1708, Adam Weide 1711.

1711: coat green, caps with covers. 1712: caps with eagles, neckcloth red, coat green, buttons brass with eagles, trousers and stockings red. 1715: coat green with red cuffs and brass buttons, trousers green, cloak red and blue, neckcloth red, caps with covers, including officers' caps embroidered with gold; 2 flags. 1716: caps with covers. 1718: coat dark green, trousers goat leather, stockings white, cloak dark green, neckcloth black, caps. 1719: stockings white. 1720: gloves goat leather for NCOs. 1721: coat dark green, trousers chamois leather.

Biels' Grenadiers (1st Grenadiers, Corps in Finland)

Raised in 1708. Colonels: Efim Boeck 1708, Leinrot 1710, Alexander Frazer 1711, Ivan von Mengden 1712, Denis Biels 1717.

1708: caps. 1709: caps. 1711: coat blue, caps. 1712: caps. 1714: caps. 1717: caps. coat red, cloak blue.

Second Grenadiers

Raised in 1710. Colonels: Ilya Lutkovsky 1710, Denis Biels 1714, Ivan Baryatinsky 1717.

1711: buttons brass with eagles, waistcoat and stockings red. 1714: caps. 1716: coat green, waistcoat red, cloak blue, trousers blue, NCOs', corporals' and clerks' coats with gold and silver lace. 1717: waistcoat red, trousers blue, caps, blue facing. 1718: neckcloth white. 1719: neckcloth white. 1720: coat green, waistcoat red, trousers blue, cloak blue, knitted gloves for NCOs, caps with covers.

Campenhausen Grenadiers

Raised in 1708. Colonels: von Adonow (?), Ivan Campenhausen 1712.

1709: coat dark green, trousers red, caps. 1711: coat dark green. 1713: coat green, trousers goat leather, stockings grey, caps and hats. 1714: caps. 1715: coat green. 1717: cloak green. 1718: coat red, trousers goat leather, cloak green, neckcloth red.

Lacy Grenadiers

Raised in 1708. Colonels: Tailor 1708, Peter Lacy 1709, Andrey de Brilli 1711.

1711: coat red, caps. 1713: hats for train drivers. 1715: caps. 1716: stockings blue. 1718: caps with covers.

Infantry

Arkhangelogorodsky Infantry (Arkhangelsk)

Raised in 1700 in Kazan through conscription. Colonels: Zachary Krog 1700, Roman Bruce 1702.

1706: hat. 1708: coat green with blue. 1710: hat. 1711: hat. 1712: hat. 1713: trousers white; flags 1 white and 7 azure. 1715: *karpus*. 1716: coat blue with blue lining, red cuffs and collar, brass buttons, trousers blue, cloak red with blue lining, *karpus* blue with green flaps. 1717: coat white, cloak red; arrived: coat blue with red lining, red cuffs and collar, brass buttons, waistcoat red, trousers blue, cloak red with blue lining. 1718: blue coat, red waistcoat, red cloak, blue *karpus*. 1720: *karpus*. 1721: green waistcoat, cloak red.

Astrakhansky Infantry (Astrakhan)

Raised in 1700 in Moscow through conscription. Colonels: Alexander Gordon 1700, Mikhail Sheremetev 1704.

1700: coat dark green. 1708: cloak red. 1711: coat green, trousers elk leather. 1715: trousers goat leather, hat, grenadier caps; 8 big old white flags including one with eagle; 8 green standards with yellow fringe, including one with eagle; 2 big red flags with words 'Za Veru i Khristianstvo'; 8 flags green, including one white with eagle, given in Pomerania; 8 flags green, including one with eagle, made in 1715 in Koenigsberg. 1717: coat dark green, trousers goat leather, hat, grenadier caps. 1719: trousers goat leather, grenadier caps. 1720: cloak red. 1721: hat.

Azovsky Infantry (Azov)
Raised in 1700 in Moscow from volunteers, in 1702 split in two regiments. Colonels: Matvey Treiden 1700. Tikhon Gundertmark 1702, Yury Busch 1704.

1704: coat blue, waistcoat and trousers red; grenadier caps bearskin. 1707: grenadier caps red cloth embroidered with silk. 1709: *karpus*. 1710: buttons brass. 1713: *karpus*. 1715: *karpus*. 1717: coat green, cloak red. 1718: *karpus*. 1720: knitted gloves for NCOs.

Belgorodsky Infantry (Belgorod)
Raised in 1696–97 in Belgorod from men of other regiments. Colonel: Savva Aigustov 1698.

1709: coat dark green, trousers goat leather and red cloth, stockings red, hat with trimming, neckcloth red. 1710: coat dark green with red cuffs, buttons pewter with eagle, trousers red, cloak red, hat trimmed with white linen. 1711: coat blue with red cuffs and blue lining, trousers and stockings red, *karpus* yellow with red lining, neckcloth red, boots; '2 flags including one white with eagle, another green with diagonal lines in black and white'. 1712: coat blue, *karpus* yellow with red lining, stockings white, neckcloth black; the first flag white with the Tsar's cipher painted with gold, surrounded with palm leaves; seven flags of black and green quarters with red stripes in between and stitched with yellow, emblem painted with gold: lion escapes from eagle. 1713: stockings white, gaiters. 1714: coat blue with red cuffs and dark green lining, buttons brass; NCO's and corporal's coat with gold lace, clerk's coat red with silver lace; trousers and cloak blue; *karpus* blue with red lining, red neckcloth. 1716: white stockings. 1717: dark green coat with red lining; NCO's and corporal's coat with gold lace; goat leather trousers, grey stockings; *karpus* green with red flaps, neckcloth black. 1718: blue cloak with red lining. 1719: green coats 1,312 including 982 with red lining; NCO's and corporal's coat with gold lace; trousers dark green 1,152, trousers red 160; *karpus* green with red flaps, neckcloth red.

Butyrsky Infantry
Raised in 1656/57 in Moscow as Second *Vyborny*. Colonels: James Gordon 1700.

1700: coat red. 1705: flags crimson. 1707: coat red. 1709: hat. 1711: coat and trousers red, boots, hat, *karpus* red or yellow with red lining. 1712: coat and trousers red, stockings white, hat, *karpus* red or yellow with red lining. 1713: gaiters of tent linen; departed: '100 grenadier caps of red cloth with blue flaps, badges of white cloth with gilded eagle over it; 3 officers' grenadier caps of light blue velvet embroidered with gold and silver; 190 grenadier bags of black leather with brass badges and crowns'; tassels on the 100 caps – black wool. 1714: coat red with yellow cuffs and lining, red waistcoat, *karpus*. 1717: coat red (English uniforms), *karpus*. 1718: coat red, trousers goat leather.

Chernigovsky Infantry (Chernigov)
Raised in 1700 in Moscow from volunteers. Colonels: William von Schweiden 1700, Yury Shkot 1704, Petr Gassenius 1705.

1710: coat dark green. 1711: trousers green, hat, coat dark green; in two companies detached in Kiev – coat red, trousers white. 1712: coat green and white, trousers red, cloak blue and red, hat. 1713: coat white with red cuffs and lining, waistcoat white, trousers cowhide, stockings white, gaiters, hat, neckcloth red. 1714: coat 83 red (probably for NCOs), stockings grey. 1715: coat red with blue cuffs and lining, stockings white, *karpus*, neckcloth red. 1717: cloak blue with red lining. 1718: coat blue with red cuffs and lining, trousers goat leather, cloak blue, hat. 1720: cloak red with blue lining and brass hooks and loops.

Galitsky Infantry (Galich)
Raised in 1704 in Nizhny Novgorod from garrison soldiers. Colonels: Ivan Stubensky 1704.

1705: white flags. 1711: coat white with red facing. 1717: coat green.

Ivangorodsky Infantry (Ivangorod)
Raised in 1700 in Kazan. Colonels: Andrey Mitchel 1700, Andrey Romanovsky 1705. Disbanded in 1712.

1711: coat green, trousers red, hat. 1712: coat green with pewter buttons, trousers red, stockings grey, neckcloth red, hat.

Ingermanlandsky Infantry (Ingermanland)
Raised in 1703 in St. Petersburg from chosen soldiers of other regiments. Colonel: Alexander Menshikov 1703.

1704: coat grey; flags light blue. 1705: flags yellow. 1707: coat green with red cuffs and lapels, waistcoat and trousers red. 1708: coat green with red cuffs as in Preobrazhensky. 1709: cloak red. 1710: waistcoat and trousers goat leather, cloak red; coat single-breasted. 1711: waistcoat and trousers goat leather, cloak red, hat; '8 dragoon flags and new 1 foot and 2 dragoon flags given in the Turkish campaign'. 1712: cloak red. 1713: coat blue, waistcoat and trousers white, hat. 1714: cloak red. 1715: coat green, trousers goat leather, hat, grenadier caps. 1717: cloak blue; coat green with red facing, hat with paper (white?) rosette (cockade). 1718: coat red, trousers goat leather, hat. 1720: cloak red.

Kazansky Infantry (Kazan)
Raised in 1700 in Moscow from volunteers. Colonels: Ivan von Delden 1700, Ludwig Hallart 1705.

1709: hat. 1711: coat blue, *karpus* red with blue lining. 1712: coat blue, *karpus* red with blue lining. 1714: *karpus*. 1717: coat green, after September – blue, cloak blue, *karpus*. 1718: trousers goat leather. 1720: knitted gloves for NCOs, corporals and clerks.

Kievsky Infantry (Kiev)
Raised in 1700 in Moscow through conscription. Colonels: William von Delden 1700, Christophor Zimmerman 1701, Joachim Goulitz 1702, Nikolay Goering 1703, Boris Sheremetev 1705.

1710: coat red with yellow cuffs, trousers red, stockings blue, cloak red, hat. 1711: coat red with yellow cuffs, trousers and cloak red, hat. 1712: hat. 1713: stockings white, hat, neckcloth black. 1714: coat red. 1715: hat, neckcloth red; coat for train drivers grey, cloak blue with red lining, stockings white and grey. 1716: coat blue with white facing and lining, buttons brass for NCOs and pewter for privates, trousers blue, hat. 1718: cloak blue with red lining, neckcloth red. 1719: coat blue with red cuffs and lining, buttons brass, gold lace for NCOs, trousers blue; *karpus* blue with red lining, hats for NCOs and corporals. 1721: waistcoat and trousers blue.

Koporsky Infantry (Koporie)

Raised in 1703 in Kazan out of garrison soldiers. Colonels: Afanasy Skripitsyn 1703, Alexey Golovin 1706.

1703: coat green, cloak grey, hat black. 1710: coat dark green, trousers goat leather, cloak homespun grey. 1711: coat dark green, trousers goat leather, cloak homespun grey, hat; buttons pewter, trousers red, stockings white. 1712: coat dark green, trousers red, stockings white, driver's coat grey and waistcoat of coloured linen; hat, neckcloth red. 1713: cloak blue with brass hooks and loops. 1714: coat blue, trousers goat leather, *karpus*, neckcloth red. 1716: coat red, trousers goat leather, cloak blue, *karpus* green, neckcloth red. 1717: coat (or just facing) blue. 1718: coat red, trousers blue and goat leather, cloak red, green and blue, *karpus* green. In Zeughaus in Narva there were flags of Koporsky: 'green with emblem and iron finial, 2 yellow, 2 reddish, 1 red with brass gilded finial, 1 *gvozdichny* (shade of grey), 1 white with eagle'. 1719: coat blue, trousers goat leather, *karpus* red, neckcloth black. 1720: coat blue with red cuffs, trousers goat leather, cloaks of varying colours, *karpus* red, neckcloth black, fourier pennants green.

Lefortovsky Infantry

Raised in 1656 in Moscow as First *Vyborny*. Colonels: Yury Lim 1701, William von Schweiden 1703.

1700: coat red. 1711: coat red, *karpus* green with red lining; coat red with yellow facing, buttons pewter, trousers red, stockings blue. 1712: coat red with pewter buttons; trousers red and goat leather, stockings blue, neckcloth black, *karpus* red with yellow, hats for NCOs. 1713: cloak blue. 1714: coat red. 1715: trousers goat leather, *karpus*. 1717: coat dark green, trousers red cloth and goat leather, hat. 1718: trousers goat leather, cloak green. 1719: coat green, trousers red, hat. 1720: hat.

Moskovsky Infantry (Moscow)

Raised in 1700 in Moscow from volunteers. Colonels: Gustav Ivanitsky 1700, Ivan Sak 1701, Matvey Bordovik 1701, Georg Benedict Ogilvy 1704, Heinrich-Friedrich Frize 1707.

1701: flags 1 white and 9 *osinovy* (shade of greyish green). 1707: Tsar ordered to make white coats with red cuffs. 1709: trousers red cloth and goat leather, hat, neckcloth black. 1711: coat red, *karpus* red with blue lining. 1712: coat, cloak and *karpus* dark green, trousers red, neckcloth black; fourier pennants dark green-yellow. 1714: coat red, trousers goat leather, cloak red.

1715: *karpus* blue. 1716: coat dark green, cloak red. 1717: trousers blue, cloak and *karpus* red; coat (or just facing) red. 1718: coat green, cloak red, *karpus* green and red, neckcloth red. 1720: *karpus* red.

Narvsky Infantry (Narva)
Raised in 1704 in Moscow from volunteers and through conscription. Colonels: Adam Schonback 1704, Gavrilo Golovkin 1705.

1710: coat dark green with red cuffs, buttons pewter with emblem, trousers red, cloak red, boots, hat black trimmed with white linen. 1711: coat dark green, trousers and cloak red, hat. 1712: coat green, trousers red, stockings white, cloak red, hat. 1713: coat blue, waistcoat white, trousers white, hat with lace, neckcloth black. 1714: cloak red. 1716: coat blue with red cuffs and lining, hat. 1718: coat blue, trousers goat leather, cloak red. 1720: coat green with red cuffs and lining, hat.

Nevsky Infantry (Neva)
Raised in 1713 in Kiev.

1717: *karpus*. 1719: coat dark green, trousers blue, cloak red. 1722: coat green, waistcoat red and blue, trousers goat leather, cloak red.

Nizhegorodsky Infantry (Nizhny Novgorod)
Raised in 1700 in Moscow through conscription. Colonels: Astafy Pohlman 1700, Michael Strausberg 1701, Denis Ridder 1703, Effren 1706, Arot, Pfeilenheim 1707, Hartwig-Friedrich Nostitz 1707.

1700: coat 'cherry' (shade of red close to brown). 1701: flags 10 cherry. 1708: cloak red. 1711: coat green, trousers goat leather, hat. 1712: coat green, *karpus* green with red lining, 1 white flag, 7 green flags. 1714: coat green, trousers blue. 1717: arrived coat red (including NCO coats with silver lace), trousers blue, cloak blue and red, *karpus* red; coat green, after September – red with blue facing and three buttons on sleeve. 1718: coat red, trousers goat leather, cloak red and blue.

Novgorodsky Infantry (Novgorod)
Raised in 1700 in Moscow through conscription. Colonels: Nikolay Balk 1700, Nikolay Goering 1705, Pfeilenheim 1707.

1700: coat red. 1709: hat or *karpus* per Juel. 1710: trousers goat leather, shoes 'kurpy' with stockings. 1711: coat green, *karpus* white with green lining. 1712: coat green, *karpus* white with green lining, gaiters of tent linen. 1714: *karpus*. 1717: *karpus*. 1719: coat blue with red cuffs and lining, *karpus*. 1720: cloak red with brass hooks and loops, *karpus*.

Permsky Infantry (Perm)
Raised in 1700 in Kazan through conscription. Colonels: Ivan Angler 1700, Tomofey Treiden 1701.

1707: hat. 1708: coat green with red facing. 1712: coat green, *karpus* yellow, cloak light green. 1713: coat and waistcoat white, gaiters of tent linen, neckcloth red. 1714: coat white and 87 red (probably, for NCOs), hat. 1715:

coat red, trousers goat leather, *karpus* green, neckcloth red. 1717: cloak blue. 1718: cloak red, hat. 1720: hat.

Pskovsky Infantry (Pskov)
Raised in 1700 in Moscow through conscription. Colonels: Ivan Mews 1700, Peter d'Albonne 1707.

1700: coat light blue. 1711: coat green, hat, *karpus*. 1712: coat green, hat, waistcoat and trousers goat leather; cloak red with blue lining, *karpus*; 1 white flag with emblem, 7 azure flags. 1713: coat red, cloak blue, *karpus* yellow. 1714: *karpus*. 1717: *karpus* green; coat red with yellow facing, cloak blue.

Rostovsky Infantry (Rostov)
Raised in 1700 in Kazan from volunteers. Colonels: Kaspar Goulitz 1700, Nikolay von Werden 1706, Ivan Chambers 1706.

1705: flags red. 1707: Tsar ordered manufacture of green coats. 1710: coat dark green, trousers goat leather, cloak homespun grey, hat. 1711: coat dark green, trousers red, cloak homespun grey. 1712: coat green; trousers red and goat leather, hat; there was 1 white flag with eagle and 7 red flags, arrival of white flag with eagle and 7 light blue flags. 1714: coat green with red cuffs for privates and for NCOs with gold lace, coat red with blue cuffs and silver lace for clerks, trousers blue, cloak blue with red lining; *karpus* green with red lining, neckcloth red. 1717: coat green, trousers goat leather, cloak blue, *karpus* green. 1720: coat green, trousers goat leather, hat; 1 white and 7 light blue flags.

Ryazansky Infantry (Ryazan)
Raised in 1703 in Ladoga from chosen men of three regiments. Colonels: Daniil Cooper 1703, Nikolay Lang 1705.

1704: coat blue, waistcoat and trousers cherry. 1711: coat green, *karpus*. 1712: coat green, hat. 1713: coat blue, *karpus*. 1716: *karpus*. 1717: coat blue with red facing. 1719: coat red, *karpus* green. 1720: cloak blue, trousers goat leather.

Saksonsky or Rentzel's Infantry (Saxony)
Raised in 1707 from surviving men of Patkul's Corps in Poland-Saxony. Colonels: Samuil Rentsel 1700.

1711: coat green, *karpus* green with red lining; buttons pewter, trousers and stockings red. 1712: coat green with pewter buttons, trousers red, stockings red, neckcloth red, *karpus* green with red lining, hat for NCOs; 1 white flag, 7 red flags. 1714: coat green, *karpus*. 1716: cloak with white collar. 1717: coat blue, *karpus*. 1718: coat blue. 1719: *karpus*, silver lace for NCO coats. 1720: trousers goat leather.

Sankt-Peterburgsky Infantry (Saint Petersburg)
Raised in 1703 in St. Petersburg from volunteers of other regiments. Colonels: Alexander Menshikov, Lieutenant Colonel Nikolay Neitert 1703.

1706: hat. 1708: hat. 1711: hat. 1712: coat red, cloak green. 1713: coat red, trousers white, cloak green, neckcloth white; 1 white flag, 7 reddish flags. 1714: cuffs green, *karpus*, neckcloth white. 1716: coat red, waistcoat green,

trousers blue, cloak green, silver lace for NCOs, *karpus* blue. 1717: coat red with green facing; waistcoat green, *karpus* blue with red flaps. 1718: coat red, waistcoat green, trousers red, cloak green, neckcloth white. 1719: coat and trousers red. 1720: *karpus*.

Sibirsky Infantry (Siberia)
Raised in 1700 in Moscow through conscription. Colonels: Irik von Werden 1700, Mikhail Frank 1701, Ivan Angler 1702, Feodor Belling 1706.

1700: coat green. 1708: coat green, trousers goat leather yellow, stockings red and white, shoes 'kurpy', *karpus*, neckcloth black. 1710: cloak homespun grey, boots. 1711: coat green, boots, hat. 1712: coat, cloak and *karpus* green; 1 white and 7 yellow flags. 1714: stockings grey. 1715: coat red, trousers goat leather, cloak blue, *karpus* green, neckcloth white. 1717: coat red with blue facing; waistcoat green, neckcloth white. 1718: coat red and green, cloak green, *karpus* red, green and blue. 1720: *karpus*.

Smolensky Infantry (Smolensk)
Raised in 1700 in Moscow through conscription. Colonels: Ilya Bils 1700.

1701: 4 'straw yellow' flags. 1708: coat dark green, waistcoat and trousers red.1 white and 4 'lemon' flags. 1709: coat dark green, waistcoat and trousers red, hat, grenadier caps. 1712: cloak red, gaiters of tent linen. 1713: coat white with red cuffs and lining, buttons brass, waistcoat and neckcloth red; 1 white flag, 7 'red with yellow' flags. 1714: coat 86 red (probably for NCOs); for recruits – coat grey, waistcoat of coloured linen, cap red cloth, motley sash, white neckcloth. 1715: coat and *karpus* dark green, trousers goat leather, neckcloth red. 1718: coat dark green, trousers goat leather, cloak red, hat, neckcloth red. 1720: trousers goat leather, cloak red, hat, neckcloth red.

Tobolsky Infantry (Tobolsk)
Raised in 1703 in Moscow through conscription. Colonels: Nikita Repnin 1704.

1705: flags yellow. 1706: Tsar confirmed issue of seven black silk flags; high boots. 1707: Tsar ordered manufacture of blue coats. 1711: coat green, *karpus* green with red lining. 1712: coat green with pewter buttons, trousers red, neckcloth red, *karpus* green with red lining, hat for NCOs, stockings white. 1722: waistcoat green and white, trousers goat leather, cloak green.

Troitsky Infantry
Raised in 1700 in Moscow through conscription. Colonels: Matvey Fliwerk 1700, Daniil Cooper 1701, Yury Abram 1701, Iov Abram 1702.

1700: coat green with dark green facing; flags green. 1708: coat white with red facing. 1710: trousers dark green, coat dark green with red lapels and cuffs, 18 grenadier caps of same colours; fourier pennants of uniform colours. 1712: fourier pennants of red and green cloth. 1713: *karpus*. 1715: *karpus*. 1718: coat and *karpus* green, cloak red. 1720: trousers blue.

Tverskoy Infantry (Tver)
Raised in 1700 in Moscow from volunteers. Colonels: Karl-Peter Dewson 1700, Yury Abram 1701, Daniil Cooper 1701, Alexey Kellen 1702. Disbanded in 1712.

1701: 1 white and 7 '*tausiny*' (dark blue) flags. 1710: coat dark green, trousers red, hat, shoes and boots. 1711: coat dark green, trousers red, hat. 1712, when the unit was disbanded: 1 white flag with eagle and 7 green flags transferred to Yaroslavsky Infantry.

Ustyuzhsky Infantry (Ustyug)
Raised in 1702 in Smolensk out of garrison *streltsy*. Colonels: Ivan Ozerov 1700, Ivan von Mengden 1707. Disbanded in 1712.

1707: coat azure, 2 flags of red and azure silk. 1708: cloak red with yellow lining. 1712: coat white with blue cuffs, buttons pewter, trousers blue, *karpus* white with green flaps, neckcloth black.

Shlisselburgsky Infantry (Schlisselburg)
Raised in 1700 in Moscow from volunteers, in 1702 split in two regiments. Colonels: Matvey Treiden 1700, Tikhon Gundertmark 1702, Yakov Kartashov 1704, Benedict Povish 1704, Zaborovsky 1705.

1711: coat green, *karpus* red with yellow lining. 1712: coat green with red cuffs, neckcloth red, *karpus* green with red lining, hats for NCOs, buttons pewter, trousers red, stockings white, fourier pennants of green and red cloth. 1714: coat blue, *karpus*. 1715: coat blue, cloak red, *karpus*. 1716: *karpus*. 1717: coat blue, cloak red. 1718: *karpus*. 1719: coat blue, cloak red, *karpus* green. 1720: knitted gloves for NCOs, corporals and clerks. 1722: waistcoat blue.

Velikolutsky Infantry (Velikie Louki)
Raised in 1700 in Kazan through conscription. Colonels: Nikolay von Werden 1700, Alexey Deduit 1703, Gordon (after 1705), Astafiev.

1705: flags dark green. 1711: coat dark green, hat; coat, waistcoat and trousers dark green; per Viskovatov – coat white with cuffs blue, *karpus* white with red flaps. 1712: coat dark green, trousers red. 1715: coat dark green, *karpus*. 1717: coat dark green, *karpus*.

Vladimirsky Infantry (Vladimir)
Raised in 1700 in Moscow through conscription. Colonels: Tomas Jungor 1700, Vasily Poroshin 1703.

1700: coat green. 1703: coat red, waistcoat and trousers white, hat, grenadier caps bearskin with red top; 1 white flag with eagle. 1705: coat red, hat. 1706: coat red, hat. 1707: coat red, hat. 1708: coat red, hat. 1709: arrived: stockings and shoes. 1711: coat red with white cuffs and lapels. 1712: cloak blue. 1713: neckcloth white. 1714: coat green with red cuffs and lining (including 80 coats with lace), cloak blue, *karpus* green. 1716: coat red with blue cuffs and lining, trousers goat leather, cloak green, *karpus* blue. 1719: coat red with blue lining (including 80 coats with lace), trousers goat leather, cloak blue with red lining, brass hooks and loops, *karpus* blue with red lining. 1720: trousers goat leather, cloak blue; 8 flags black including one white with eagle. 1721: coat red, waistcoats red and green, cloaks red, blue and green.

Vologodsky Infantry (Vologda)
Raised in 1700 in Novgorod from volunteers and through conscription. Colonels: Roman Bruce 1700, Ivan Ridder 1702, Ivan von Buterer 1704.

1705: flags red. 1709: coat green, trousers goat leather, *karpus* green, neckcloth red. 1710: cloak grey. 1711: coat green, cloak grey, *karpus*; '1 red flag, 1 white flag'. 1712: arrived: hats, *karpus* white with green lining manufactured but probably did not arrive. 1715: *karpus*. 1717: coat blue, cloak blue, *karpus* red, neckcloth white; coat green, cloak red. 1718: coat blue and red, trousers goat leather, cloak red, *karpus* blue.

Voronezhsky Infantry (Voronezh)
Raised in 1700 in Moscow. Colonels: Friedrich Balk 1700.

1709: coat red, trousers blue and white. 1710: coat dark green, trousers dark green, hat. 1711: coat dark green, waistcoat and trousers of chamois leather, trousers for NCOs of green cloth, stockings white, hat, neckcloth red. 1712: coat green, *karpus* red with yellow lining. 1713: coat dark green, trousers chamois leather, cloak blue, *karpus* green. 1714: coat dark green, *karpus*. 1716: *karpus*, gloves. 1717: coat red, cloak green. 1718: trousers blue. 1719: coat red, *karpus* red. 1720: knitted gloves for NCOs, corporals and clerks.

Vyatsky Infantry (Vyatka)
Raised in 1700 in Kazan through conscription. Colonels: Pavel Berner 1700, Alexander Sharf 1704, Ivan Shneberg 1706, Alexey Golitsyn 1706.

1705: flags ash-grey. 1711: coat and trousers dark green, hat. 1712: coat green, stockings white, hat; '1 white and 7 black flags with gilded finials'. 1713: waistcoat leather, gaiters of tent canvas, hat. 1714: trousers leather, cloak blue, *karpus* green. 1717: cloak red with yellow lining, *karpus*, 'Mecklenburg flags'. 1718: hat with lace for NCOs; coat, waistcoat, trousers and loops blue, cuffs white, *karpus*. 1720: cloak red, *karpus*, hat for NCOs.

Vyborgsky Infantry (Vyborg)
Raised in 1700 in Novgorod from volunteers and through conscription. Colonels: Ivan Kulom 1700, Andrey Inglis 1701.

1701: 3 flags dark red. 1709: coat green for NCOs, white for privates. 1711: coat green for NCOs, clerks and oboist, white for privates, trousers goat leather, hat. 1712: cloak green, *karpus* white with green. 1713: 'arrived: 1 white and 7 blue flags'. 1714: coat green with red collar and cuffs, buttons brass, *karpus* green. 1715: coat green with red collar and cuffs, buttons brass, cloak green, *karpus* blue. 1716: waistcoat red, trousers blue, cloaks 1,160 green with blue lining and 101 green with red lining, NCO coat green with red cuffs and collar, with blue lining and with lace; *karpus* green with blue flaps and white tape. 1717: coat green with red cuffs, collar and lining, waistcoat red; *karpus* green with blue flaps and white tape. 1719: waistcoat red. 1720: cloak green, *karpus*. 1721: waistcoat green.

Yamburgsky Infantry (Yamburg)
Raised in 1705. Colonels: Iakov Vestov 1705. Disbanded in 1712.

1707: coat dark green. 1711: coat dark green with red cuffs, trousers red, stockings red, hat; 8 'smoke' (shade of grey) flags.

Yaroslavsky Infantry (Yaroslavl)
Raised in 1700 in Simbirsk from local soldiers. Colonels: Philipp Kar 1700, Alexey Bolobonov 1701.

1701: flag light '*gvozdichny*' (light grey). 1703: coat green, trousers red, shoes, boots. 1704: coat green, trousers red, grenadier and drummers' caps of green and red cloth. 1705: grenadier caps bearskin with red cloth top. 1706: greadier and drummers' caps cloth embroidered with silk. 1707: drum belts red with metal lace. 1708: coat green with red cuffs and lapels, waistcoat and trousers red. 1709: *karpus* green with red flaps, buttons brass, 'kurpy' shoes. 1711: *karpus* for recruits red. 1712: cloak green, 'kurpy' shoes, stockings blue, 1 white flag with eagle and 7 green flags from the disbanded Tverskoy Infantry; coats for train drivers and servants grey with green facings. 1713: coat and waistcoat white, trousers chamois leather and later blue, gaiters of tent linen, hat. 1714: stockings white, shoes, boots. 1715: coat and *karpus* blue, trousers goat leather, neckcloth red; 32 NCO's coats have silver lace in two rows; 48 corporals' coats, lace in one row. 1717: stockings grey, cloak red with yellow lining. 1718, Mecklenburg uniforms: *karpus*, hat with lace for NCOs; coat, waistcoat, trousers blue, cuffs and loops white, *karpus*. 1720, uniforms issued in Mecklenburg: coat blue, cloak red, *karpus*, hat for NCOs.

St. Petersburg Garrison
Raised in 1703 in St. Petersburg. Colonels: Yury Urn 1703, Tomas Frazer 1706, Yakov Bakhmeotov 17(??)

1708: coat grey with red.

Horse Grenadiers

Kropotov Dragoon Grenadiers
Raised in 1709. Colonels: Gavrila Kropotov 1709, Osip Scherbatov 1720.

1709: coat dark green, NCOs' coats with lace, drummers' coats with braids, grenadier caps. 1711: trousers goat leather. 1712: coat dark green, trousers goat leather, caps. 1715: coat blue, waistcoat goat leather. 1716: cloak red with green lining, neckcloth red. 1718: waistcoat goat leather, trousers red, caps. 1719: coat blue with brass buttons, red collar, cuffs, loops and lining, cloak red with blue lining.

Von der Ropp Dragoon Grenadiers
Raised in 1709. Colonels: Christophor von der Ropp 1709, von Mannstein 1720.

1711: trousers goat leather, caps. 1712: coat green, trousers goat leather. 1713: coat green, trousers goat leather. 1714: coat green, waistcoat and trousers goat leather, cloak red. 1715: coat green, waistcoat and trousers goat leather, cloak red, caps with covers. 1718: waistcoat goat leather, cloak red, caps. 1718: coat green, waistcoat goat leather, caps.

Khlopov Dragoon Grenadiers

Raised in 1709. Colonels: Andrey Kropotov 1709, Semen Khlopov 1709.

1709: coat green, waistcoat, trousers and cloak red, caps. 1715: trousers goat leather, cloak red. 1718: waistcoat goat leather. 1719: coat blue with brass buttons, white collar and cuffs, white lining.

Dragoons

Arkhangelogorodsky Dragoons

Raised in 1703 in Yamburg from chosen men of other dragon regiments. Colonels: Boris Sheremetev.

1704: supposedly, coat yellow with green cuffs, waistcoat and shoulder belt green, *karpus* yellow with green, horses light grey. 1708: hat, 5 white flags, cloak yellow with red lining, coat with red cuffs, lapels and collar; coat for drummers red. 1709: hats for grenadiers. 1710: coat green, trousers goat leather, cloak blue, boots, shoes, stockings, *karpus* green, neckcloth red. 1714: coat white, waistcoat and trousers goat leather, cloak red, hat. 1717: *karpus* white with blue facing, coat 752 blue with white facing and 308 white, waistcoat and trousers goat leather, cloak red with green lining. 1718: cloak red with green lining. 1719: waistcoat goat leather, stockings white.

Astrakhansky Dragoons

Raised in 1701 in Moscow. Colonels: Ivan Lvov 1701, Ivan Ignatiev 1702, Magnus Netlergost 1705.

1706: coat dark green, waistcoat and trousers red; 700 red coats given to Pskovsky regiment. 1707: coat green, hat, grenadier caps; 1,391 old red coats given away. 1708: coat green, trousers goat leather, cloak red, 10 white coats for barbers. 1710: hat, shoes, stockings, boots. 1711: coat and waistcoat dark green, cloak red, hat. 1712: cloak red, hat. 1714: non-combatants' coat homespun grey, waistcoat of coloured linen, sash. 1715: coat blue, waistcoat goat leather, *karpus* red. 1716: cloak red with blue facing. 1719: *karpus* blue with red flaps; coat dark green with brass buttons, red collar, cuffs and loops, red lining, waistcoat and trousers goat leather, cloak dark green with red lining, 10 white quartermeister pennants.

Ingermanlandsky Dragoons

Raised in 1703 in Moscow. Colonels: Alexander Menshikov 1703.

1705: hat with white tape, grenadier caps. 1708: coat blue with red cuffs and lining, trousers goat leather, cloak red with blue lining, hat. 1712: hat, neckcloth red, coat dark green with red facing, waistcoat dark green, trousers elk leather, cloak dark green with red facing. 1714: hat. 1718: *karpus*.

Kazansky Dragoons

Raised in 1701 in Moscow. Colonels: Danila Shenshin 1701, Mikhail Zybin 1702, Andrey Akhmatov 1703, Afanasy Astafiev 1703.

1712: hat, quartermeister pennants of red and green cloth. 1715: *karpus*. 1717: *karpus*. 1721: hat.

Kargopolsky Dragoons (Kargopol)
Raised in 1707 in Moscow. Colonels: Ivan Boltin 1707, Marel de Karger 1708, Ivan Boltin 1709.

1707: coat dark green, waistcoat and trousers red, hat, neckcloth red, *chabraque* green, holster covers green with fringe. 1709: coat and cloak dark green, waistcoat and trousers red, hat, neckcloth red. 1712: coat white with blue lining, hat, 1 white flag, 9 reddish flags. 1713: cloak red with green lining. 1714: *karpus* blue with red lining, coat white with red cuffs and lining. 1715: waistcoat and trousers goat leather, neckcloth red. 1716: cloak green. 1717: *karpus* white with blue lining, coat blue with white cuffs and lining, waistcoat and trousers goat leather.

Kievsky Dragoons
Raised in 1698 in Moscow. Colonels: Andrey Shnevents 1700, Rodion Bauer 1701.

1700 and 1701: flag black. 1712: hat. 1714: hat. 1715: hat. 1719: *karpus*. 1720: cloak red. 1721: coat green, *karpus*.

Leib-Squadron (General Squadron)
Raised in 1706 in Gomel from chosen men of dragoon regiments. Colonels: Alexander Menshikov 1706.

1706: coat dark green, cuffs and collar red trimmed with gold lace, buttons gilded on two breasts, waistcoat red with lace, trousers red, cloak red with yellow lining, neckcloth black, hat with gold lace, belts laid with lace and probably blue cloth. 1707: grenadier caps blue with brass plates, 'edges laid with lace in three rows – gold and silver inside'. 1709: coat dark green, NCO coats with lace on cuffs, pockets and collar), buttons gilded on single breast, waistcoat and trousers elk leather, cloak red with dark green lining, karpus lightgreen with red flaps, crown of *karpus* has cross laid of gold lace; belts of NCOs laid with lace. 1719: *karpus*, grenadier caps.

Leib-Regiment
See Sankt-Peterburgsky Dragoons

Lutsky Dragoons (Velikie Louki)
Raised in 1705 in Koporie. Colonels: Timofey Putyatin 1705, Rudolph von Schaumburg 1706, Fedor Chekin 1708.

1706: coat homespun grey with red. 1707: coat blue with red, hat, grenadier cap. 1711: coat dark green, cloak red, *karpus*, grenadier cap. 1714: coat dark green, trousers blue, cloak red, *karpus*, grenadier cap, coat for non-combatants homespun grey. 1718: waistcoat red. 1720: *karpus*.

Moskovsky Dragoons
Raised in 1700 in Moscow. Colonels: Efim Goulits 1700, Nikolay von Werden 1702, Carl-Evald Ronne 1703.

1700: green flags, coat dark green, cap and sash red. 1701: 2 'lemon' flags. 1706: 9 green flags painted with silver, finions iron; 1 flag white with eagle painted with gold. 1707: neckcloth red, hat, grenadier cap and red *chabraque*

for grenadiers; 5 green flags with black eagles, including 1 white flag. 1709: cloak red, hat. 1711: cloak red with blue lining, waistcoat and trousers leather, hat, neckcloth black; 1 red flag painted with white, brass finion. 1712: coat white with cuffs and lining blue, waistcoat goat leather, trousers elk leather, cloak red with blue lining; neckcloth black, hat; quartermeister pennants of green and red cloth; 9 red flags painted with gold, finions brass, 1 flag white painted with gold. 1714: *karpus*. 1718: *karpus*.

Narvsky Dragoons
Raised in 1705 in Belgorod. Colonels: Ivan Pestov 1705, Ivan Paur 1705, Ivan von Felzin 1706.

1706: coat coarse wool, hat. 1708: grenadier caps. 1711: *karpus*, grenadier caps. 1714: coat blue, cloak red, *karpus* green.

Nevsky Dragoons
Raised in 1704 in Moscow. Colonels: Jan Portess 1704, Anton von Stoltz 1705.

1706: hat. 1707: hat, grenadier caps. 1708: hat. 1709: hat. 1711: cloak blue. 1712: coat dark green, waistcoat and trousers goat leather, hat. 1714: coat white, waistcoat and trousers goat leather, hat. 1719: coat dark green, waistcoat and trousers goat leather. 1720: *karpus*.

Nizhegorodsky Dragoons
Raised in 1702 in Novgorod. Colonels: Ludwig Wolmat-Bodevy 1702, Andrey Morell de Carier 1703, Ivan Boltin 1704, Otto-Rudolph von Schauenburg 1705.

1707: hat. 1709: hat. 1711: *karpus*. 1712: quartermeister pennants of red and green cloth. 1713: *karpus* red with dark green facing, neckcloth black, coat white with red facing, waistcoat goat leather, trousers elk leather, cloak red with green facing. 1715: coat dark green, waistcoat goat leather, hat. 1716: coat dark green, cloak and neckcloth red. 1718: hat. 1719: *karpus* green with red facing, neckcloth black, coat red with blue lining, waistcoat goat leather, trousers deer leather and elk leather, cloak blue with red collar and lining.

Novgorodsky Dragoons
Raised in 1701 in Moscow. Colonels: Nikita Meschersky 1701, Grigory Volkonsky 1702.

1706: hat. 1707: coat blue with brass buttons, cloak red. 1708: hat. coat blue with red. 1710: coat white, waistcoat and trousers goat leather, cloak red, *karpus*. 1711: coat white. 1712: 1 white flag, 9 reddish flags. 1713: coat white, waistcoat and trousers goat leather, cloak red, *karpus* green, neckcloth red. 1715: waistcoat and trousers goat leather. 1716: coat white with blue lining, cloak red with green lining. 1718: coat white with blue lining and brass buttons, *karpus*. 1719: waistcoat and trousers goat leather, cloak green with red lining. 1720: cloak green, *karpus*.

Novotroitsky Dragoons
Raised in 1708 from men of other dragoon regiments. Colonels: Gavrila Kropotov 1708, Semen Meschersky 1709.

1721: coat blue, waistcoat and trousers goat leather, cloak blue, *karpus*.

Olonetsky Dragoons (Olonets)
Raised in 1700 as *Reiters*, transformed into dragoons in 1707. Colonels: Moisey Murzenko 1700.

1707: hat. 1709: coat dark green, cloak blue, hat, *karpus* for drummers. 1712: coat blue, waistcoat dark green, trousers chamois leather, cloak blue, *karpus*. NCO's coat and karpus with lace. 1715: coat dark green, waistcoat and trousers goat leather, cloak blue, *karpus* blue, neckcloth red. 1718: coat blue, waistcoat goat leather, trousers blue, *karpus* red. 1719: cloak blue.

Permsky Dragoons
Raised in 1703 in Moscow. Colonels: Ivan Gorbov 1703.

1703: 1 white and 9 red flags with a cross, silk tassels, on white flag tassel with gold. 1709: coat red, trousers white. 1711: *karpus*. 1712: quartermeister pennants of red and green cloth. 1713: coat white. 1714: *karpus*. 1715: waistcoat goat leather. 1716: coat white with red cuffs and lining. 1717: waistcoat yellow. 1718: coat dark green. 1719: coat dark green, waistcoat goat leather, cloak red with green lining and collar, *karpus*.

Pskovsky Dragoons
Raised in 1701 in Moscow. Colonels: Fedor Novikov 1701, Vasily Vadbolsky 1702, Nikolay Inflant 1703.

1707: coat dark green with pewter buttons and red facing, cloak red, grenadier caps. 1708: hat. 1709: coat green, trousers white. 1711: 1 red flag. 1712: hat, coat blue with red facing, waistcoat and trousers goat leather, cloak red with blue facing. 1715: hat, neckcloth red, coat dark green, waistcoat and trousers goat leather, cloak red, 1 white flag. 1717: waistcoat goat leather, trousers chamois leather. 1718: *karpus* and neckcloth red, coat blue, cloak red. 1719: waistcoat and trousers goat leather. 1720: *karpus* and neckcloth red, coat blue, cloak red; 1 white flag with Sovereign's coat of arms (probably cipher) on gold, issued in 1715; 9 flags dark lemon with emblem of snow leopard on silver issued in 1720.

Rostovsky Dragoons
Raised in 1706. Colonels: Kruz 1707.

1710: neckcloth black. 1712: there were: hat, coat dark green, waistcoat red, trousers goat leather, cloak red; arrived: hat, neckcloth red, coat dark green with red facing, waistcoat dark green, trousers elk leather, cloak blue with red facing.

Ryazansky Dragoons
Raised in 1705 in Smolensk. Colonels: Nikolay Gerenk 1705, Gustav-Alfred Gein 1706.

1706: hat. 1708: coat old light blue, hat. 1709: hat. 1710: cloak red with blue facing, neckcloth red. 1711: coat dark green with red facing, trousers elk leather, *karpus* blue. 1712: coat dark green with red facing, trousers elk leather, cloak red with blue lining, neckcloth red, *karpus* blue. 1713: waistcoat goat leather. 1714: *karpus*. 1717: hat. 1720: hat.

Sankt-Peterburgsky (Leib-Regiment before 1719)
Raised in 1707 from men of other dragoon regiments. Colonels: Anton Eshov 1707.

1707: coat blue, waistcoat, trousers and cloak red, hat, shabraque with holster covers blue. 1708: hat. 1709: hat, coat green; NCO hat and coat with silver lace, drummers coat with silver lace and with, supposedly red, 'trip' – a velvet-like textile probably on facings, waistcoat and trousers red, cloak red. 1710: coat green, waistcoat and trousers red. 1712: coat white with red cuffs and brass buttons, waistcoat yellow, trousers goat leather, cloak red, hat. 1715: coat blue, waistcoat and trousers goat leather, cloak red, hat, neckcloth red. 1717: waistcoat and trousers goat leather. 1718: waistcoat and trousers goat leather. 1719: *karpus* white with blue facing; coat blue with brass buttons, white collar, cuffs and lining, cloak blue with red collar and lining.

Sibirsky Dragoons
Raised in 1701 in Moscow. Colonels: Alexander Malina 1701, Gebhard Pflug 1703.

1704: coat blue with red, waistcoat and trousers red, hat. 1707: coat dark green, waistcoat and cloak red, hat. 1708: trousers goat leather. 1710: *karpus*, 1 white flag. 1711: 1 red flag. 1712: waistcoat goat leather, cloak red, *karpus*, 1 white flag, 9 yellow flags. 1714: on a deserter: green coat with 18 brass buttons, red lining and cuffs; red waistcoat, goat leather trousers, red cloak. 1715: hat. 1718: trousers blue, *karpus* red with blue facing. 1719: coat blue with red facing and blue lining, cloak red with blue lining.

Tverskoy Dragoons
Raised in 1703. Colonels: Grigory Sukhotin 1703, Iuda Boltin 1705, Anton Dumont 1705, Michael von Schultz 1706.

1708: coat white, trousers goat leather, cloak red with blue lining, hat. 1709: neckcloth black, *karpus* green with red facing. 1710: coat dark green with red facing, waistcoat and trousers goat leather, cloak red with blue facing, neckcloth red, *karpus* dark green and hat. 1711: stockings red, trousers goat leather. 1712: coat green with red facing, trousers red, waistcoat and trousers goat leather; cloak red with blue lining, neckcloth red, *karpus* dark green and hat. 1713: *karpus* blue, neckcloth black, coat white, waistcoat goat leather, trousers elk leather, cloak red. 1715: *karpus* blue, neckcloth black, coat green, waistcoat and trousers goat leather. 1717: *karpus* red, coat red, waistcoat and trousers goat leather. 1720: *karpus* blue with red facing, coat blue, waistcoat and trousers goat leather, cloak red.

Tobolsky Dragoons
Raised in 1707. Colonels: Vasily Arakcheev 1707.

1707: hat. 1709: grenadier caps. 1711: hat. 1713: *karpus*. 1715: *karpus*. 1716: cloak red. 1717: *karpus*. 1718: coat dark green, *karpus*. 1719: waistcoat goat leather. 1720: coat blue, cloak red.

Troitsky Dragoons
Raised in 1701 in Moscow. Colonels: Semen Kropotov 1701, Georg-Gustav von Rosen 1705.

1702: 10 white flags. 1707: waistcoat and cloak red, hat, grenadier caps. 1708: coat dark green, hat. 1710: trousers goat leather, hat. 1712: hat, neckcloth black, coat dark green, cloak green with yellow lining, 1 white and 9 red flags. 1714: hat, neckcloth red, coat white, waistcoat and trousers goat leather, cloak blue. 1717: karpus red, coat blue, waistcoat and trousers goat leather, cloak red. 1719: cloak red. 1720: coat blue, waistcoat goat leather, *karpus*.

Ustyuzhsky Dragoons
See Yamburgsky Dragoons

Vladimirsky Dragoons
Raised in 1701 in Moscow. Colonels: Mikhail Zhdanov 1701, Peter Meschersky 1702.

1709: coat white, hat, grenadier caps. 1710: cloak blue with red lining, hat. 1711: coat green with red facing, karpus red, hat, neckcloth black, trousers goat leather and elk leather . 1712: coat green with red lining, waistcoat and trousers goat leather, cloak blue with red facing, 100 white coats for drivers, neckcloth red, *karpus* red. 1713: waistcoat goat leather, neckcloth red. 1714: deserters (probably non-combatants) had a coat white with same cloth buttons and blue lining, trousers goat leather. 1715: hat, coat blue with red facing, waistcoat goat leather, cloak red with light blue facing. 1716: waistcoat goat leather. 1718: *karpus* green with red facing. 1719: hat, coat blue with red cuffs and red lining, waistcoat chamois goat leather, trousers elk leather and deer leather, cloak red with blue collar and blue lining. 1720: hat. 1721: neckcloth red.

Vologodsky Dragoons
Raised in 1705 in Belgorod. Colonels: Fedor Khruschov 1705, Vasily Monastyrev 1706.

1706: coat grey, hat. 1708: coat green with blue; arrived: white coats, grenadier caps. 1709: hat. 1711: coat dark green, karpus, grenadier caps. 1712: trousers goat leather. 1714: coat and *karpus* green, cloak red.

Vyatsky Dragoons
Raised in 1701 in Novgorod. Colonels: Denis Devgerin 1702, Phillipp Suvas 1703, Andrey Volkonsky 1705.

1704: hat. 1706: coat green, waistcoat, trousers and neckcloth red. 1707: hat, grenadier caps with emblems. 1709: coat white, hat. 1711: waistcoat goat leather. 1713: karpus. 1714: waistcoat and trousers goat leather, cloak green. 1715: coat and karpus red. 1717: waistcoat goat leather, cloak green. 1718: coat blue, karpus.

Yamburgsky (Ustyuzhsky before 1712) Dragoons
Raised in 1707. Colonels: Roman Volkonsky 1707.

1707: hat, neckcloth white. 1707: coat yellow with red cuffs, lapels and lining, waistcoat and trousers dark green, buttons brass. 1710: hat, neckcloth

black, coat dark green with red facing, waistcoat and trousers goat leather, cloak dark green with yellow facing. 1712: hat, neckcloth black, coat dark green with red facing, waistcoat and trousers goat leather, cloak dark green with yellow facing. 1714: hat, coat white, waistcoat goat leather. 1717: *karpus*. 1718: *karpus*.

Yaroslavsky Dragoons

Raised in 1706 in Moscow. Colonels: Grigory Volkonsky 1706.

1710: hat, neckcloth red, waistcoat dark green, trousers elk leather. 1711: hat. 1712: waistcoat dark green, trousers elk leather, cloak light blue, neckcloth red, hat. 1713: hat, neckcloth white, coat white, trousers chamois leather, cloak red with green lining. 1714: hat. 1717: *karpus*. 1720: *karpus*.

Artillery Regiment

Established as regiment in 1701. Colonels: Johann Goshka 1701, Johann Gunter 1706.

1704: coat of red or brown cloth with blue collar and cuffs, buttons brass, waistcoat and trousers red, stockings, shoes with brass buckles, hat. 1706: high boots, hat. 1708: coat red with blue collar and cuffs, buttons brass, waistcoat red, trousers leather, stockings grey, shoes with brass buckles, hat; for horse gunners red cloaks. 1712: trousers elk leather, hat with white trimming. 1715: boots, *karpus* red with blue flaps. 1717: cloak blue with red lining.

Colour Plate Commentaries

Uniform Plates by Nikolay Zubkov

Plate 1, left to right. The army of 1700–1703: Dragoon, Moskovsky Dragoons; soldier, Novgorodsky Infantry; private, *streltsy* regiments.
A soldier of Colonel Nikolay Balk's (Novgorodsky since 1708) infantry regiment in a red coat of what was called 'Hungarian' style. This type of uniform was typical for the Petrine military until Western style was introduced in 1703–1704. The imported Dutch flintlock in his kit is supplemented with plug bayonet. Swords were not common for the infantry in 1700.

While Moscow *streltsy* regiments had coloured coats of various shades of red, yellow, blue, green and even white, their men supposedly had cheaper grey coats for campaign or fatigue service. The *berdysh* axe was a distinctive weapon for *streltsy* throughout the 17th century. Note the musket with a 'Scottish snaphaunce' lock – these were imported in the 1690s; despite *streltsy* being old-fashioned infantry, even they did not have matchlock and bandoliers by 1700s.

Nobles who enlisted in the dragoon regiment of General Adam Weide (Colonel Goulits in 1700, Moskovsky since 1706) in February 1700 were paid money to purchase dark green coats, red caps and sashes. It was only in 1706 that dragoon regiments received issued uniforms; until then they bought costume items on their own and there are no known regulations that would prescribe cut or color.

Plate 2, left to right. The army of 1704–1707: fusilier, Yaroslavsky Infantry; grenadier, Azovsky infantry; sergeant, Vladimirsky Infantry.
A soldier of an infantry regiment after the change from 'Hungarian' to Western style uniforms. According to eyewitness accounts, by 1704 most field troops had adopted the new garb. Their exact cut is unknown, so at the moment scholars guess that it was double-breasted coats.

A grenadier of Colonel Ivan Bush's (Azovsky since 1708) infantry regiment – one of the few units with a known uniform colour (blue) for 1704. All grenadier companies wore bearskins as observed by a foreign eyewitness the same year. Although these caps seem to have been popular in the first decade of the century, there are almost no data about their construction except that they had a soft cloth top. Where shoes and stockings are not mentioned among issued items, we can assume the men kept wearing high boots from their Oriental costume. Moreover, later on high boots were issued along with

shoes, and of course were more practical footwear for campaigning in mud and snow.

A sergeant of Colonel Vasily Poroshin (Vladimirsky since 1708) infantry regiment sports an unusual white waistcoat and trousers issued along with his red coat in 1703. Rank insignia were lace on cuffs; the only known regulation referred to Guards and prescribed single narrow lace for corporals, double narrow lace for captain of arms and double broad for sergeants. Halberd axe after Narva 1700 archeology.

Plate 3, left to right. The army of 1708–1711: Cannonier, Artillery regiment; NCO, Khlopov Horse Grenadiers; pikeman.

Red with blue facings remained the artillery colours from the early 1700s until the 1720s. Unlike the infantry, gunners had coloured collars as early as 1704. Cannoniers' individual equipment included linstock, powder horn and sword.

Infantrymen were likely to wear only a waistcoat without a coat in summertime. Note the pistol on a belt hook – such were to be given to pikemen of 47 fusilier battalions of the main army in August 1708. The neck cloth was red or black and after 1708 was to be short, i.e. with no loose ends on the front. Where the colour of stockings is unknown it is safe to assume they were grey, for it was the cheapest choice. Although hats were supposed to be trimmed with white lace, some units missed it; the Tsar's own hat at Poltava was all black without trimming.

Dragoon grenadiers of Khlopov Regiment in 1709 had a dark green coat, red waistcoat and trousers, and a grenadier cap of an unknown colour and pattern. The proposed type of cap with decorated flaps and curved soft top is based on the piece from Suvorov Museum and on the cartouche of the map of the siege of Vyborg from Uppsala University; this type seems to be popular in the late 1700s when bearskins went out of fashion. Dragoon coats, unlike those in the infantry, had so called 'cavalier collar' with buttons; this type of coat was typical for all dragoons from 1706 until the 1710s when it became single-breasted. This NCO must be a veteran of the battle of Kalisz, 1706, according to the medal on his breast. His broadsword's blade bears a double eagle engraving – most likely it was manufactured in Solingen. With a grenade bag on a broad belt and cartridge pouch on a narrow belt over another shoulder, he is supposed to have yet another belt – a bandolier with a hook to carry his dragoon fusil.

Plate 4, left to right. The army and navy 1712–1721: sailor; soldier, Belgorodsky Infantry; dragoon, Sibirsky Dragoons.

A fusilier of Belgorodsky 1717 (or Tobolsky in 1712, Vladimirsky 1714, Velikoluksky 1715, or Moskovsky 1718). White canvas gaiters, often made of old tents, adopted in the Russian army starting in 1712 as a consequence of the first campaign in Pomerania. Note that the coat now has a collar; cuffs lack buttons and the man does not have a waistcoat at all; sturdy leather trousers and *karpus* cap complete the typical 1710s impression. Fastened turnbacks probably became popular in late 1710s and were the norm in the 1720s; sparse period pictures show them more often on dragoons than on infantry. The blunderbuss was issued in quantities – 140 per unit – to

infantry regiments in the Corps in Finland.

A dragoon of Sibirsky Dragoons in 1718–1719 in red cloak lined with blue, and *karpus* with six small and one big button laid with lace as per 1712 reglement. The flap of the *karpus* is turned facing colour out, while that on the soldier's cap is speculatively turned facing colour inside.

Sailors adopted western style uniforms, too – complete with woollen cap, based upon two specimens found in Peter's collection. Their coats and trousers most often were grey and only for higher classes of seamen were they coloured. The striped neck cloth and red sash seem to be typical for Russian sailors throughout the 18th century.

Plate 5, left to right. Irregulars and non-combatants: Cossack; non-combatant; Bashkir

Cossacks of the Hetmanate (Ukraine) campaigned on self-supply, and if not supplied by occasional authorities' grants of quality coloured wool, they almost universally wore white wool coats. Don and Yaik Cossacks were dressed and armed more or less same way, except for Ukranians more often shaved their beards. Just like all other participants of the war, their outlook on campaign was probably more ragged than we can imagine.

Bashkir horsemen from the Southern Urals area, together with Tartars and Kalmyks, brought their exotic nomadic appearance and horrifying war methods to this European conflict. This one must be a *tarkhan* – a warlord who could afford a coloured coat and costly sabre and belt. The *sadaq* – typical weapons kit for these oriental bowmen – would often be supplemented with a short lance.

Train drivers or officers' servants – this is where recruits often started their service in regiment. This non-combatant wears a grey coat with pewter buttons that must had separated him visually from rank and files clad as a rule in coloured uniforms. The combination of regulation European grey coat with native red cap and striped sash is documented for recruits in Smolensky Infantry in 1714, however we may speculate this was probable for units where certain new items were lacking and a mixture of old and new garb was inevitable.

Contemporary Items

A

Officer's kit of the Preobrazhensky Life Guards, worn by Tsar Peter in the battle of Poltava, 1709. Photograph by Konstantin Sinyavsky, Svetlana Suetova, Vladimir Terebenin. Photograph © The State Hermitage Museum, St. Petersburg, 2017.

B–C

Coats reportedly captured in the battle of Narva, 1700. Provenance of their 1700 origin is lacking, however both represent oriental style in costume from late 17th century and seem to had belonged to officers; the red one is cut in Polish fashion (kontusz).Livrustkammaren, Stockholm.

D
Officer's partisan, 1720s. State Memorial Museum of Alexander Suvorov, St. Petersburg.

E
Infantry drum, unknown unit, first half of 18th century. State Memorial Museum of Alexander Suvorov, St. Petersburg.

F
Silver kettle drum of Menshikov's Leib-Squadron taken from the Swedes in the Battle of Poltava, 1709. Damage suffered during Swedish and then Russian service was repaired with silver patches. One of the patches bears an inscription glorifying the Swedish victory of Kliszow, 1702. State Memorial Museum of Alexander Suvorov, St. Petersburg.

G–J
Officer's grenadier cap of an unspecified regiment. Supposedly late 1700s–1710s. The unique example of an early cap with pod-shape top, this design was probably popular before tall mitre caps arrived. Silver embroidery over crimson velvet indicates the owner was an officer. Note the weapons depicted on the rear flap: bayonets with a screw-on socket and a sword hilt with cross guard must had been typical. State Memorial Museum of Alexander Suvorov, St. Petersburg.

K–O
Officer's cap, grenadier companies of Life Guard regiments, 1730–1740. This model of leather helmet was introduced in the Guards in 1712 when they bore silver (officers) or pewter (other ranks) front plates; metal in 1727 was replaced with gilt brass. This particular item belongs to the reign of Empress Anna Ioanovna, her cipher on the rear plate that covers the feather holder. State Memorial Museum of Alexander Suvorov, St. Petersburg.

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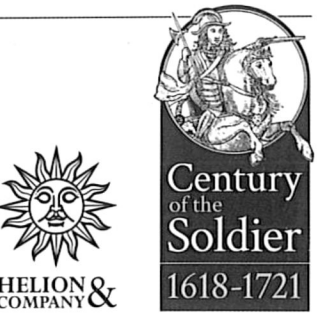

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This book describes the armed forces of Peter the Great in their entirety, and covers in depth old Russian troops and irregulars, as well as Peter's new standing army (guards, infantry, dragoons, elite units and artillery) and his brand-new force (the navy, with sailing ships and galleys, and marines). Besides the staffing, organization and development of troops, the book provides a detailed account of uniforms, weapons and other materiel (both conventional and unusual). Training is described using drill manuals and tactical instructions of the period, and fighting methods actually performed on the battlefield are described - based on first-hand accounts and period observations from Russian, Swedish and impartial sources. Pitched battles that often predominate in descriptions of early 18th century warfare are given their due in the book; however, linear tactics on the field were not the only - nor even the main - type of actions during the Great Northern War, so the author goes into details of the sieges, minor actions and riverine, lake and naval combat.

The author has utilised materials that have been hitherto unavailable to English-speaking readers and scholars, and the book not only contains the author's own research, but is also based on the most recent works of other Russian scholars who specialize in various aspects of Petrine military history; this makes the book a comprehensive and up-to-date overview of Peter the Great's military forces during the Great Northern War (1700-1721). The book is supplemented with numerous contemporary prints and paintings, photos of artefacts and recreated uniform kits, as well as specially-commissioned artwork that has been created by an artist who is knowledgeable in details from that period.

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